

ENVIRONMENTAL ASSESSMENT STATIONING A U.S. ARMY RESERVE BLACK HAWK HELICOPTER COMPANY AT JOINT FORCES TRAINING BASE LOS ALAMITOS, CALIFORNIA

Prepared for:



63d Regional Support Command
Directorate of Public Works
Environmental Branch
230 R.T. Jones Road
Mountain View, California 94043

Prepared by:



**VERNADERO
GROUP**
INCORPORATED

4422 East Indian School Road
Suite 101
Phoenix, Arizona 85018

DOCUMENT NUMBER
USACE0910-03-00-0234

March 2011



Top Photo by Ted Carlson, courtesy of the U.S. Army

Bottom Photo by Air Force Staff Sgt Bradley Lail, courtesy of the U.S. Army

Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE MAR 2011		2. REPORT TYPE		3. DATES COVERED 00-00-2011 to 00-00-2011	
4. TITLE AND SUBTITLE Environmental Assessment Stationing a U.S. Army Reserve Black Hawk Helicopter Company at Joint Forces Training Base Los Alamitos, California				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Vernadero Group Inc,4422 East Indian School Road Suite 101,Phoenix,AZ,85018				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 144	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

FORMAT PAGE

HOW THIS ENVIRONMENTAL ASSESSMENT IS ORGANIZED

The EXECUTIVE SUMMARY briefly describes the Proposed Action and Alternatives. Impacts and conclusions are summarized.

ACRONYMS AND ABBREVIATIONS

- SECTION 1 PURPOSE AND NEED discusses the purpose and need for the Proposed Action, the regulatory background surrounding this project, and the scope of this Environmental Assessment.
- SECTION 2 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES discusses the Proposed Action and alternatives addressed in this Environmental Assessment.
- SECTION 3 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES describes the existing environment within the Region of Influence. It also provides a comparison of environmental consequences associated the alternative. Conservation and mitigation measures are also addressed in this section.
- SECTION 4 FINDINGS AND CONCLUSIONS
- SECTION 5 REFERENCES provides bibliographical information for sources cited in the text of this Environmental Assessment.
- SECTION 6 LIST OF PREPARERS AND CONTRIBUTORS
- SECTION 7 DISTRIBUTION LIST
- SECTION 8 LIST OF INDIVIDUALS AND AGENCIES CONSULTED



Printed on Recycled Paper

FORMAT PAGE

ENVIRONMENTAL ASSESSMENT

STATIONING A U.S. ARMY RESERVE BLACK HAWK HELICOPTER COMPANY AT JOINT FORCES TRAINING BASE LOS ALAMITOS, CALIFORNIA

Prepared by:

Vernadero Group Incorporated
4422 E. Indian School Road
Suite 101
Phoenix, Arizona 85018

Reviewed by:

LAURA M. CABALLERO
Chief, Environmental Branch
63d Regional Support Command, DPW

Recommended by:

ROBERT D. JOHNSON
Colonel, EN
63d Regional Support Command, DPW

Approved by:

JON D. LEE
Brigadier General, USAR
Commanding
63d Regional Support Command

FORMAT PAGE

EXECUTIVE SUMMARY

This Environmental Assessment (EA) analyzes the potential environmental effects associated with the stationing and operation of a United States (U.S.) Army Reserve (USAR) Black Hawk Company (the Company) at Joint Forces Training Base (JFTB) Los Alamitos (also referred to as “the Installation”), California.

The Proposed Action, which is the Army’s preferred alternative, involves relocating an 87-member Aviation Company from Aviation Support Facility (ASF) Victorville, California to JFTB Los Alamitos. The Company includes A Company 2-238th AVN Regiment and Detachment 1 from D and E Companies. Its wartime mission is to provide aerial Command and Control support, limited air assault, and air movement for the corps and higher level commands. The Company is part of the 11th AVN Command, headquartered at Fort Knox, Kentucky; however, Detachments within the Company report directly to the 7-158 AVN located at Fort Hood, Texas. The Company consists of 29 full-time personnel and 58 part-time Reserve Soldiers and includes 8 UH-60 Black Hawk helicopters, 2 High Mobility Multipurpose Wheeled Vehicles (HMMWV), 3 Heavy Expanded Mobility Tactical Trucks (HEMTT), 1 flatbed trailer, and 3 fuel trailers.

Implementation of the Proposed Action would allow the USAR to improve long-term readiness for the Company by placing it in a location that provides better opportunities to recruit and retain the highly-qualified skill sets required for this unit. This unit is a high demand organization that is consistently deployed in support of current and future operations. Recruiting and hiring full-time staff for the location at ASF Victorville is costly because the majority of the people who work at ASF reside in the Los Angeles basin. Additionally, ASF Victorville is located in a leased facility, which costs the government a substantial amount of money each year.

The overall use of the Installation is compatible with the unit’s mission. JFTB Los Alamitos already accommodates both fixed-wing and rotary-wing (helicopters) aircraft from a variety of military and civilian agencies. The Black Hawk helicopter is already in use at the Installation; there are 20 CAARNG Black Hawk helicopters stationed at Los Alamitos Army Airfield. Previous operations analyzed at the Installation in a 1973 Environmental Impact Statement (EIS) have included up to 98 UH-1 “Huey” helicopters, which was the predecessor to the Black Hawk. Additionally, an internal Sustainability Study conducted by the CAARNG in 2007 assessed the impacts associated with 24 rotary wing aircraft.

A No Action Alternative was analyzed, in addition to the Proposed Action, as required under the Council on Environmental Quality regulations implementing the National Environmental Policy Act (NEPA). The No Action Alternative serves as a baseline or benchmark to be compared with the Proposed Action and alternatives. Under the No Action Alternative, the USAR would not station the Company at JFTB Los Alamitos. The USAR would continue to pay for leased facilities. Recruitment and retention of ASF employees and qualified Soldiers would remain a challenge, impacting the USAR’s ability to meet current and future missions and readiness standards.

No significant impacts are anticipated from implementing the Proposed Action. The stationing of the Company at JFTB Los Alamitos would have minor adverse impacts to regional air quality, transportation, and the noise environment. However, these effects would be less than significant. Likewise, the impacts for all other resources evaluated are anticipated to be less than significant. Implementation of the Proposed Action would also have minor direct, beneficial impacts to the local economy. A summary of potential impacts and measures to minimize adverse impacts of the Proposed Action is provided in Table EX-1. Acronyms used in the table are defined in subtext immediately following the table.

Based on the analysis contained herein, it is the conclusion of this EA that the Proposed Action or the No Action Alternative would not constitute a major federal action with significant impact on human health or the environment and that a Finding of No Significant Impact for the Proposed Action should be issued to conclude the NEPA documentation process.

Table EX-1. Summary of Potential Impacts and Measures to Minimize Impacts for the Proposed Action

Resource Area	Level of Impact			Summary of Potential Impacts and Measures to Minimize Impacts
	Significant	Less than Significant	No Impact	
Land use			X	There would be no direct, indirect, or cumulative impacts to land use on or off JFTB Los Alamitos as a result of the Company stationing action. The Company would use existing facilities at the Installation. Operations would be consistent with current activities in use at these facilities. No new construction or changes to existing land use categorizations would result from the Proposed Action.
Topography, Geology, and Soils			X	Stationing the Company at JFTB Los Alamitos and subsequent training missions do not involve any ground disturbance. No adverse impacts to topography, geology, or soils are anticipated.
Hydrology and Water Resources			X	Stationing the Company at JFTB Los Alamitos and subsequent training missions would not result in any modifications to existing surface water drainages or groundwater resources. The Company would comply with the Installation's SPCC Plan and SWPPP to prevent oil products and hazardous substances from reaching waterways. Activities associated with the Proposed Action would be consistent with existing operations on the Installation. No impacts to hydrology or water resources are anticipated.

Resource Area	Level of Impact			Summary of Potential Impacts and Measures to Minimize Impacts
	Significant	Less than Significant	No Impact	
Biological Resources and Wetlands		X		No ground disturbing activities resulting in loss of habitat would occur because the Company would use existing buildings and airfield infrastructure to perform mission requirements. The introduction of additional aircraft would increase the risk of wildlife/aircraft strike hazards. However, due to the small number of additional flights the Company would add to the Installation's existing daily flights, no direct or indirect long term or short term adverse impacts to biological resources are anticipated.
Cultural Resources			X	The Company would not be conducting ground disturbing activities or modifications to any buildings under the Proposed Action. No adverse impacts to cultural resources are anticipated.
Air Quality		X		Air emissions from vehicles, aircraft, and equipment associated with the Company stationing action are anticipated to result in a less than significant, minor adverse impact to local and regional air quality.
Visual Resources			X	Company stationing and subsequent training activities at JFTB Los Alamitos will not result in impacts to visual resources. Black Hawk helicopters are already in use by the CAARNG at the Installation. The Company may conduct some nighttime flying, however most activities would occur over undeveloped and unpopulated areas. The Company would use existing facilities at the Installation and would not require the construction of new buildings or structures.
Noise		X		Minor, long-term adverse impacts to the noise environment are expected to result from operations associated with the Company. Black Hawk helicopters are already in use at the Installation, along with other rotary wing and fixed wing aircraft. Due to the existing noise environment, the addition of the USAR helicopters is anticipated to result in less than significant impacts.
Socioeconomics and Environmental Justice		X		Minor long term beneficial impacts would result from the stationing of the Company at JFTB Los Alamitos. Reservists will travel to the area one weekend a month, which will benefit the local economy.
Transportation and Circulation		X		No significant direct or indirect impacts are anticipated as a result of the Proposed Action. The minor increase in traffic would be negligible in terms of regional transportation and circulation.
Utilities			X	The Company would use existing utilities located on JFTB Los Alamitos. The existing utilities infrastructure has enough capacity to support the Proposed Action. No impacts are anticipated.

Resource Area	Level of Impact			Summary of Potential Impacts and Measures to Minimize Impacts
	Significant	Less than Significant	No Impact	
Hazardous and Toxic Substances		X		Long-term minor adverse impacts related to hazardous materials and waste would be expected as a result of the Proposed Action. There would be an increased use of materials such as petroleum, oils and lubricants, and solvents from maintenance activities. All hazardous materials and waste would be handled in accordance with local, state, and federal regulations and in accordance with the Installation's procedures established in the HMWMP, HMBP, SWPPP, and SPCC Plan. Personnel from the Company that would operate or perform maintenance on helicopters and equipment or perform fueling activities would receive training on the Installation's plans and procedures.
Human Health and Safety		X		No significant long term or short term adverse impacts to human health and safety would be expected. Helicopter flights would use established and approved flight paths. The Proposed Action would not result in a significant impact on local fire, rescue, or law enforcement services, or medical facilities. No adverse impacts to children are expected.

JFTB-Joint Forces Training Base; **SPCC**- Spill Prevention, Control, and Countermeasures; **SWPPP**- Stormwater Pollution Prevention Plan; **CAARNG**- California Army National Guard; **HMWMP**- Hazardous Materials and Waste Management Plan; **HMBP**- Hazardous Materials Business Plan

TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
1.1	Purpose and Need for Action	3
1.2	Regulatory Framework	3
1.3	Previous Environmental Impact Analyses	4
1.4	Use of this Environmental Assessment.....	4
1.5	Public Participation Opportunities	4
2.0	DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES.....	7
2.1	Alternative One (Proposed Action).....	7
2.2	No Action Alternative.....	10
2.3	Alternatives Considered But Eliminated From Further Analysis.....	10
3.0	AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES	11
3.1	Introduction.....	11
3.2	Land Use	11
3.2.1	Affected Environment	11
3.2.2	Environmental Consequences	14
3.3	Topography, Geology, and Soils	15
3.3.1	Affected Environment	15
3.3.2	Environmental Consequences	15
3.4	Hydrology and Water Resources	16
3.4.1	Affected Environment	16
3.4.2	Environmental Consequences	17
3.5	Biological Resources.....	17
3.5.1	Affected Environment	17
3.5.2	Environmental Consequences	21
3.6	Cultural Resources.....	22
3.6.1	Affected Environment	22
3.6.2	Environmental Consequences	23
3.7	Air Quality.....	23
3.7.1	Affected Environment	23
3.7.2	Environmental Consequences	27

3.8	Visual Resources	32
3.8.1	Affected Environment	32
3.8.2	Environmental Consequences	32
3.9	Noise	33
3.9.1	Affected Environment	33
3.9.2	Environmental Consequences	39
3.10	Socioeconomics	40
3.10.1	Affected Environment	40
3.10.2	Environmental Consequences	43
3.11	Transportation and Circulation	44
3.11.1	Affected Environment	44
3.11.2	Environmental Consequences	45
3.12	Utilities	46
3.12.1	Affected Environment	46
3.12.2	Environmental Consequences	47
3.13	Hazardous and Toxic Substances.....	47
3.13.1	Affected Environment	47
3.13.2	Environmental Consequences	49
3.14	Human Health and Safety	50
3.14.1	Affected Environment	50
3.14.2	Environmental Consequences	51
4.0	FINDINGS AND CONCLUSIONS	53
5.0	REFERENCES	57
6.0	PREPARERS AND CONTRIBUTORS.....	61
7.0	DISTRIBUTION LIST	63
8.0	LIST OF INDIVIDUALS AND AGENCIES CONSULTED	65

LIST OF FIGURES

Figure 1-1. Regional Location Map	2
Figure 2-1. Alternative One (Proposed Action) Site Map	9
Figure 3-1. Communities Surrounding JFTB Los Alamitos	12
Figure 3-2. JFTB Los Alamitos Land Use Areas.....	13
Figure 3-3. JFTB Los Alamitos Flight Paths	14
Figure 3-4. National Wetlands Inventory Map of JFTB Los Alamitos	21
Figure 3-5. Four Clusters of Households Complaining of Helicopter Noise Over a 5-Year Period	35
Figure 3-6. Noise Contours at JFTB Los Alamitos.....	36
Source: CAARNG, 2007a	37
Figure 3-7. Main Traffic Arterials and Vehicle Counts in JFTB ROI.....	45

LIST OF TABLES

Table EX-1. Summary of Potential Impacts and Measures to Minimize Impacts for the Proposed Action	ii
Table 3-1. Bird Species of Special Concern Occurring in Conservation Region 32	18
Table 3-2. Threatened and Endangered Species Occurring in the USGS Los Alamitos Quadrangle	20
Table 3-3. NAAQS and Monitored Air Quality Concentrations	23
Table 3-4. NAAQS and CAAQS Attainment Status – South Coast Air Basin (Orange County) .	25
Table 3-5. Baseline Emissions Established in the 1994, 1997, and 2007 AQMPs for JFTB- Aircraft Operations	26
Table 3-6. Summarized Air Pollutant Emissions for Existing Conditions (2006) (Pounds/Day Unless Noted)	26
Table 3-7. Aircraft Operations Emissions (Pounds/Day)	28
Table 3-8. Operational Emissions for Light Industrial Development	29
Table 3-9. <i>De Minimis</i> Threshold Values (Pounds/Day)	30
Table 3-10. Common Noise Sources and Noise Levels	34
Table 3-11. Change in Aircraft that Will Exceed the Significance Threshold	37
Table 3-12. Noise Zones.....	38
Table 3-13. Census Actual and Estimated Data for Los Alamitos and Orange County	41

Table 4-1. Summary of Potential Impacts and Measures to Minimize Impacts for the Proposed Action	54
--	----

LIST OF APPENDICES

APPENDIX A. RECORD OF NON-APPLICABILITY	A-1
APPENDIX B. AGENCY COORDINATION LETTERS AND RESPONSES	B-1
APPENDIX C. EQUIPMENT FACT SHEETS	C-1

LIST OF ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
AELUP	Airport Environs Land Use Plan
AICUZ	Air Installation Compatible Use Zone
AIRFA	American Indian Religious Freedom Act
ALUC	Airport Land Use Commission
APZ	accident potential zone
AQMP	Air Quality Management Plan
AR	Army Regulation
ARB	Air Reserve Base
ARPA	Archaeological Resources Protection Act
ASF	Aviation Support Facility
AST	aboveground storage tank
AVN	Aviation
AVUM	Aviation Unit Maintenance
BASH	Bird/Animal Aircraft Strike Hazard
BGEPA	Bald and Golden Eagle Protection Act
CAA	Clean Air Act
CAAQS	California's Ambient Air Quality Standards
CAARNG	California Army National Guard
CARB	California Air Resources Board
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CNEL	Community Noise Exposure Level
CO	carbon monoxide
CWA	Clean Water Act
CX	Categorical Exclusion
CZ	clear zone

CZMA	Coastal Zone Management Act
DA	Department of the Army
dB	decibel
dBA	A-weighted decibel
DNL	day-night average sound level
DoD	Department of Defense
DPM	Diesel Particulate Matter
EA	Environmental Assessment
ECS	Equipment Concentration Site
EDMS	Emissions and Dispersion Modeling System
EIFS	Economic Impact Forecast System
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FNSI	Finding of No Significant Impact
ft	feet
HC	Hydrocarbon
HEMTT	Heavy Expanded Mobility Tactical Truck
HHC	Headquarters Headquarters Company
HMBP	Hazardous Materials Business Plan
HMWMP	Hazardous Materials and Waste Management Plan
HWWMV	High Mobility Multipurpose Wheeled Vehicle

IRP	Installation Restoration Program
JFTB	Joint Forces Training Base
LAAAF	Los Alamitos Army Airfield
LEQ	Equivalent Level
MCAR	Military Construction Army Reserve
MEP	Military Equipment Parking
MPAH	Master Plan of Arterial Highways
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act
NEPA	National Environmental Policy Act
NESHAPS	National Emissions Standards for Hazardous Air Pollutants
NHPA	National Historic Preservation Act
NMHC	Non-methane hydrocarbons
NO ₂	nitrogen dioxide
NOA	Notice of Availability
NOI	Notice of Intent
NO _x	nitrogen oxides
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
O ₃	ozone
OWS	oil/water separator
Pb	lead
PIF	Partners-in-Flight
PM ₁₀	particulate matter, fine
PM _{2.5}	particulate matter, very fine

POL	petroleum, oil, and lubricants
POV	Privately Owned Vehicle
ppm	parts per million
ROG	Reactive organic gases
ROI	Region of Influence
RPDP	Real Property Development Plan
RSC	Regional Support Command
RTV	Rational Threshold Value
SAP	Satellite Accumulation Point
SB	Senate Bill
SCAB	South Coast Air Basin
SCAQMD	South Coast Air Quality Management District
sf	square foot
SIP	State Implementation Plan
SO ₂	sulfur dioxide
SO _x	sulfur oxide
SPCC	Spill Prevention, Control, and Countermeasures
STAR	Stationing Tool Army Reserve
SWPPP	Stormwater Pollution Prevention Plan
sy	square yard
TACs	Toxic Air Contaminants
TOG	Total Organic Gases
U.S.	United States
USAEHA	U.S. Environmental Hygiene Agency
USAR	U.S. Army Reserve
USC	United States Code
USFWS	United States Fish and Wildlife Service

USGS	U.S. Geological Survey
UST	underground storage tank
VOC	volatile organic compound
$\mu\text{g}/\text{m}^3$	micrograms per cubic meter of air

FORMAT PAGE

1.0 INTRODUCTION

This Environmental Assessment (EA) was prepared to analyze the potential environmental effects associated with the stationing and operation of a United States (U.S.) Army Reserve (USAR) Black Hawk Company (the Company) at Joint Forces Training Base (JFTB) Los Alamitos, California.

The Company includes A Company 2-238th Aviation (AVN) Regiment and Detachment 1 from D and E Companies. The Company consists of 29 full-time personnel and 58 part-time Reserve Soldiers and includes 8 UH-60 Black Hawk helicopters, 2 High Mobility Multipurpose Wheeled Vehicles (HMMWV), 3 Heavy Expanded Mobility Tactical Trucks (HEMTT), 1 flatbed trailer, and 3 fuel trailers. The Company is stationed at Aviation Support Facility (ASF) Victorville at the Southern California Logistics Airport in San Bernardino County, California. ASF Victorville is located approximately 90 miles northeast of downtown Los Angeles and 95 miles northeast of JFTB Alamitos (Figure 1-1).

The Company's wartime mission is to provide aerial Command and Control support, limited air assault, and air movement for the corps and higher level commands. The Black Hawk is a versatile utility tactical transport helicopter that has enhanced the overall mobility of The Army, due to dramatic improvements in troop capacity and cargo lift capability. On the battlefield, the Black Hawk allows the commander the agility to get to the fight quicker and to mass effects throughout the battlespace across the full spectrum of conflict (USA 2010).

JFTB Los Alamitos is a 1,300-acre military Installation located in the City of Los Alamitos, Orange County, California (Figure 1-1). The Installation is located near the intersection of Interstate 605 and State Highway 22, approximately 20 miles southeast of downtown Los Angeles and approximately 5 miles from the Pacific Ocean. The Installation includes a 465-acre airfield and operates two active all weather runways, one measuring 8,000 feet (ft) long and the other at 6,000 ft.

JFTB Los Alamitos is operated by the California Army National Guard (CAARNG) and is home to a variety of CAARNG and USAR units. The Installation also hosts many other military and civilian organizations including the U.S. Marine Corps Reserve, U.S. Coast Guard, U.S. Army, Civil Air Patrol, Department of Agriculture, and the State of California's Emergency Management Agency (CAARNG, 2007a). The CAARNG is a dual-mission organization normally under the control of the Governor of California, but can be called into federal service by the President of the United States. At the state level, the Governor reserves the ability to call up members of the CAARNG during domestic emergencies and natural disasters. When mobilized for federal service, its mission is to provide support during federal crises such as combat deployments and anti-terrorism operations (CAARNG 2009a,b).

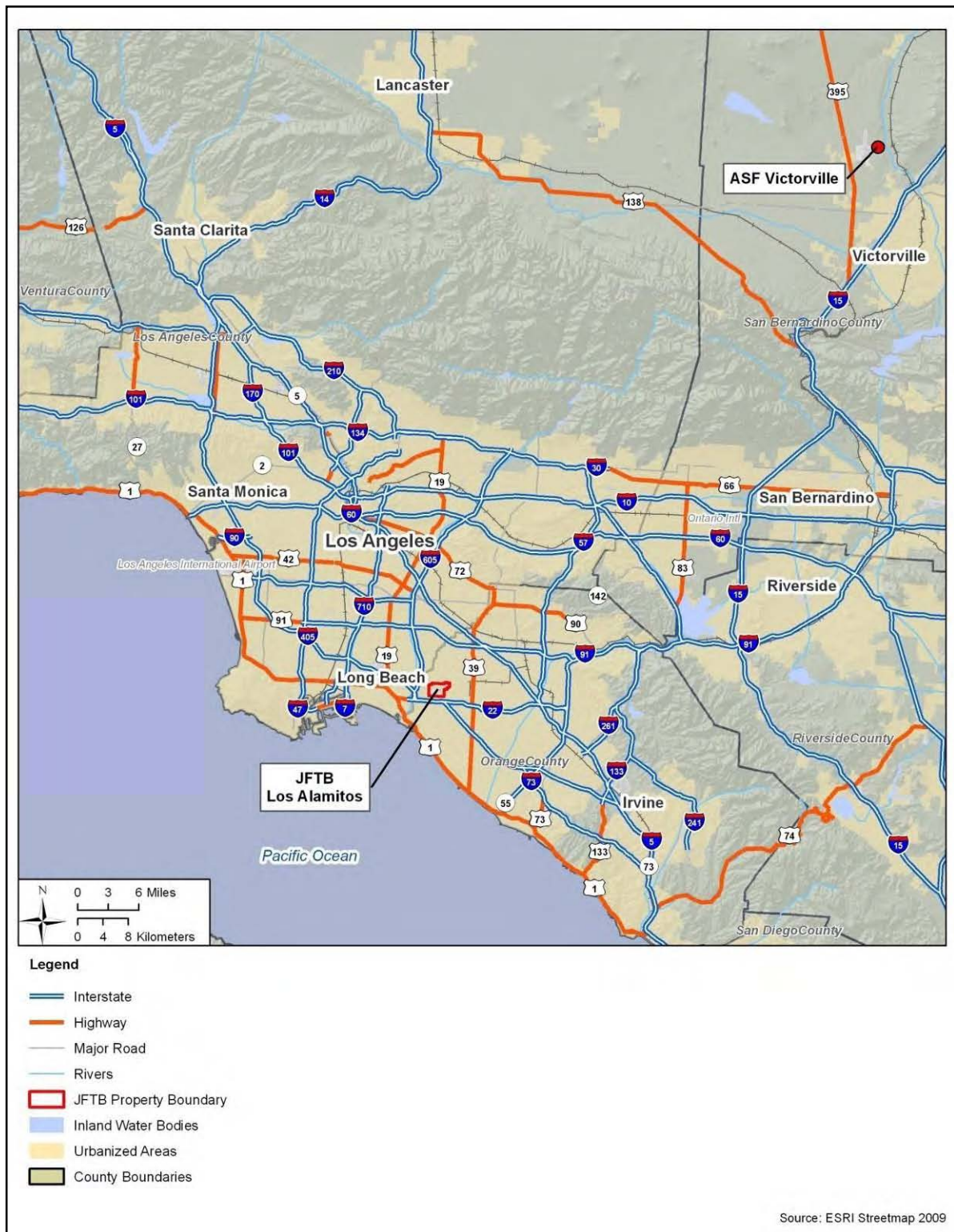


Figure 1-1. Regional Location Map

The USAR is a federal military command under the control of the Department of Defense (DoD). The USAR's mission is "to provide trained, equipped, and ready Soldiers and cohesive units to meet the global requirements across the full spectrum of operations. The USAR is a key element in The Army multi-component unit force, training with Active and National Guard units to ensure all three components work as a fully integrated team" (USAR 2010).

1.1 Purpose and Need for Action

The purpose of the Proposed Action is to relocate the Company from ASF Victorville to JFTB Los Alamitos and to provide hangar and administrative space suitable to meet the mission requirements of the Company. The need for the Proposed Action is to improve long-term readiness for the Company by placing it in a location that provides better opportunities to recruit and retain the highly-qualified skill sets required for this unit. This unit is a high demand organization that is consistently deployed in support of current and future operations. Recruiting and hiring full-time staff for the location at ASF Victorville is costly because the majority of the people who work at ASF reside in the Los Angeles basin. Additionally, ASF Victorville is located in a leased facility, which costs the government a substantial amount of money each year.

1.2 Regulatory Framework

Congress enacted the National Environmental Policy Act (NEPA) in 1969 with accompanying regulations requiring federal agencies to consider potential environmental impacts before taking actions that may impact the environment. The NEPA process is not intended to fulfill the specific requirements of other environmental statutes and regulations. However, the process is designed to provide the decision maker with an overview of the major environmental resources that may be affected, the interrelationship of these components, and potential impacts to the natural and human environment. Hence, the NEPA process:

- Integrates other environmental processes;
- Summarizes technical information;
- Documents analyses and decisions;
- Interprets technical information for the decision-maker and public;
- Helps to identify potential alternatives to the Proposed Action; and
- Assists the decision-maker in selecting a preferred action (DoD, 2002 and USAEC, 2010).

NEPA is intended to be incorporated in the early stages of the decision-making process to ensure that planning and decisions reflect environmental values, avoid delays later in the process, and minimize potential impacts to the natural and human environment.

In addition to NEPA, this EA has been prepared in compliance with two Department of the Army (DA) regulations that provide guidance for environmental analyses:

- 32 Code of Federal Regulations (CFR) Part 651, Environmental Analysis of Army Actions dated 29 March 2002, is designed to provide policy, responsibilities, and procedures for integrating environmental considerations into Army planning and decision making. It establishes criteria for determining which of five review categories a particular action falls into, and thus, what type of environmental document should be prepared. The five review categories include: (i) exemption by law; (ii) emergencies; (iii) categorical exclusions (CXs); (iv) EA; and (v) EIS. If the Proposed Action is not covered adequately in any existing EA or EIS and cannot be categorically excluded from NEPA analysis, then a separate NEPA analysis must be completed prior to the commitment of resources (personnel, funding, or equipment) to the Proposed Action;
- Army Regulation (AR) 200-1, Environmental Protection and Enhancement dated December 2007, describes DA responsibilities, policies, and procedures to preserve, protect, and restore the quality of the environment. The regulation incorporates a wide range of applicable statutory and regulatory requirements and is used in conjunction with 32 CFR Part 651.

1.3 Previous Environmental Impact Analyses

Previous environmental impact analyses have been prepared to address operation of rotary wing aircraft at the Installation. A 1973 Environmental Impact Statement (EIS) addressed operation of up to 98 UH-1 “Huey” helicopters, which was the predecessor to the Black Hawk. The CAARNG also prepared a Programmatic EA in 2002 addressing the nationwide stationing of Black Hawk helicopters as part of a phasing out plan for the “Huey.” Additionally, a 2007 Sustainability Study assessed the impacts associated with 24 rotary wing aircraft.

1.4 Use of this Environmental Assessment

This EA analyzes and documents the potential environmental effects associated with the Proposed Action and Alternative, relative to the No Action Alternative. The USAR will use this EA to determine if a Finding of No Significant Impact (FNSI) is appropriate or if a Notice of Intent (NOI) to prepare an EIS should be issued for the stationing of the Black Hawk Company at JFTB Los Alamitos.

1.5 Public Participation Opportunities

In keeping with established Army policy to provide a transparent and open decision-making process, this EA and draft decision document (either a FNSI or NOI) will be made available to applicable federal and local agencies and the general public for review and comment. Officials and representatives from these offices will be coordinated with throughout the EA preparation, as necessary. A Notice of Availability (NOA) will be published in the *Orange County Register* and *Long Beach Press Telegram* newspapers and a copy of the EA will be made available to the general public on the internet at <http://www.army-nepa.info> and at the following libraries:

West Garden Grove Branch Library
11962 Bailey Street
Garden Grove, California 92845

Los Alamitos/Rossmoor Library
12700 Montecito Road
Seal Beach, California 90740

Comments must be postmarked within 30 days of the publishing date of the NOA to be considered during the NEPA process. Comments should be submitted to:

Ms. Carmen Call
63d Regional Support Command (RSC)
Directorate of Public Works
Environmental Branch
P.O. Box 63
Moffett Field, California 94035
Phone: (650) 279-1823
Email: carmen.call@usar.army.mil

A final decision document in the form of a FNSI or a NOI to complete an EIS will be issued upon completion of the 30-day review period.

FORMAT PAGE

2.0 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

Two alternatives are considered in this EA: Alternative One (Proposed Action) and the No Action Alternative. The USAR considered many factors when determining which alternatives were feasible for the Black Hawk Company stationing action. Any location chosen for the relocation of this unit must provide the necessary facilities to support an aviation unit. This includes an airfield, hangars, flight control and ground-based support.

2.1 Alternative One (Proposed Action)

The Proposed Action, which is the Army's preferred alternative, involves stationing an 87-member Aviation Company at JFTB Los Alamitos. The Company includes A Company 2-238th AVN Regiment and Detachment 1 from D and E Companies. Its wartime mission is to provide aerial Command and Control support, limited air assault, and air movement for the corps and higher level commands. The Company is part of the 11th AVN Command, headquartered at Fort Knox, Kentucky; however, Detachments within the Company report directly to the 7-158 AVN located at Fort Hood, Texas. The Company consists of 29 full-time personnel and 58 part-time Reserve Soldiers and includes 8 UH-60 Black Hawk helicopters, 2 HMMWVs, 3 HEMTTs, 1 flatbed trailer, and 3 fuel trailers.

A stationing analysis of this proposal was conducted using the Stationing Tool Army Reserve (STAR). STAR is a web-based tool that uses objective analysis to improve the effectiveness of the USAR stationing process while meeting the needs of the USAR as it transforms to an operational force. STAR captures the ability of the local area to recruit and maintain unit personnel, provides career progression opportunities for USAR Soldiers, and identifies locations and capacities of existing facilities (USA 2008). STAR uses data from several databases that provide demographics, unit data, and facility information to help pinpoint prime recruiting areas.

Out of more than 24,429 geographic locations analyzed across the continental United States using STAR, Los Angeles/Long Beach area scored 60th as a prime recruiting area. Information on the other 59 locations that ranked higher can be found in Section 2.3, *Alternatives Considered but Eliminated from Further Analysis*. Victorville, the unit's current location, scored 4,743rd (Lewis 2010). The greater Los Angeles basin provides better recruiting opportunities for both the reserve positions as well as the full-time support positions within the ASF.

The USAR has an existing aviation facility at JFTB Los Alamitos. Hangar 3 (Building 912) is being used by Headquarters Headquarters Company (HHC) and C Company 6th Battalion, 52nd Aviation Regiment (6-52 AVN). This is a fixed-wing (airplane) unit with four C-12 aircraft. The facility has an adequate amount of space to accommodate the additional Company. Consolidating the helicopter companies into this available space allows the USAR to maximize usage of the existing hangar space, while eliminating the requirement for a leased facility in Victorville and the cost of operating two separate ASFs. The USAR is coordinating the real estate requirements of the proposed relocation with the CAARNG.

Once stationed at JFTB Los Alamitos, the Company would be collocated with the 6-52 AVN HHC and C Company in Building 912 (Hangar 3) (Figure 2-1). Building 912 would provide maintenance bays, storage, and administrative offices for the ASF personnel. Even when fully occupied by the 6-52 AVN, the facility is underutilized and has sufficient space available to accommodate the additional Company.

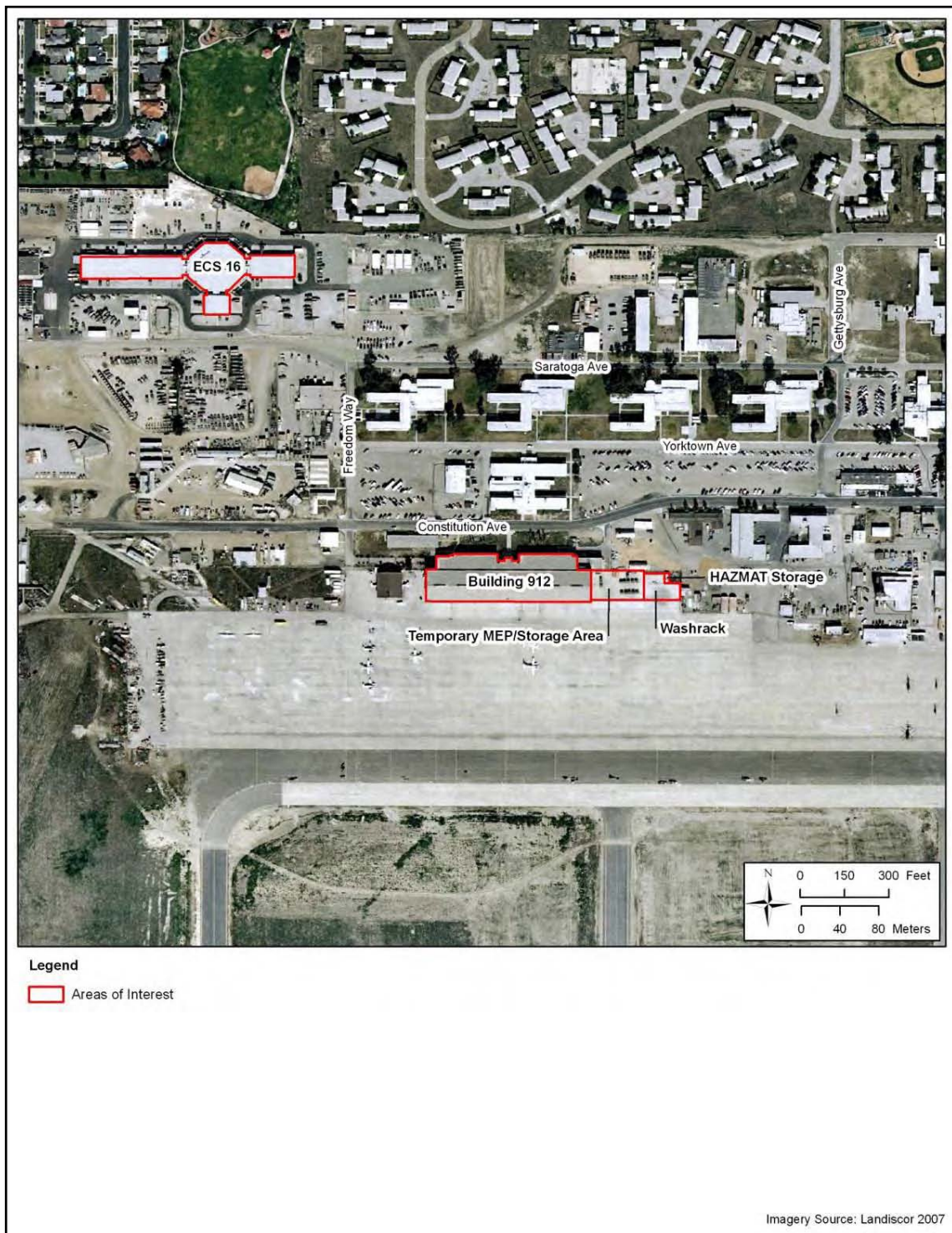
The Company would store helicopters and perform light helicopter maintenance in Building 912. Light helicopter maintenance is considered Aviation Unit Maintenance (AVUM) and consists of component replacement. It does not include component repair. For example, if the radio is not functional, the Company will swap out the radio and send the broken radio up to the next level, which is AVIM (Aviation Intermediate Maintenance).

The Company would store additional helicopters outside at existing tie-down sites at the airfield. Wheeled vehicles and equipment that do not fit within Building 912 would be stored at the Equipment Concentration Site (ECS) 16, located across Constitution Avenue. Unit-level vehicle and equipment maintenance activities would be conducted at ECS 16. ECS 16 does not provide maintenance support for helicopters. Helicopters requiring Intermediate or Depot level maintenance will be evacuated to other facilities.

The area surrounding Building 912 includes a temporary military equipment parking (MEP) and temporary storage area, a washrack, and hazardous materials/waste storage (Figure 2-1). The Company would share these support facilities with the 6-52 AVN staff already using this area.

Of the eight Black Hawk helicopters assigned to the Company, at any given moment, one aircraft would be in “reset phase” maintenance and four would be in for regularly scheduled daily maintenance. Reset phase maintenance is performed at various locations across the country and is determined based on workload at the time the maintenance is required. Typically there would only be 3 or 4 aircraft parked on the flight line, with a combined average of 15 additional flights per week (2 to 3 flights Tuesday through Thursday, 1 to 2 flights on Monday and Friday, and the possibility of 1 or 2 flights per weekend). These additional flights would be conducted during regular airfield hours and would last an average 1 ½ hours each. The Company would perform helicopter flight training operations from JFTB Los Alamitos, to include utilizing existing arrival and departure procedures from the airfield into the national airspace system. Company pilots would follow established flight patterns already being used by fixed-wing and rotary-wing aircraft that operate and train at the Installation. Additional information on flight paths can be found in Section 3.2, *Land Use*.

Stationing the Company at JFTB Los Alamitos would allow the Company to recruit qualified individuals and offer critical training opportunities to help the Soldiers successfully achieve their wartime missions. The available capacity and location of JFTB Los Alamitos, along with the existing airfield and ample infrastructure, would sufficiently support the Proposed Action. Implementation of the Proposed Action would contribute to the USAR’s ability to meet mission requirements and maintain mission readiness.



ECS- Equipment Concentration Site; **HAZMAT-** Hazardous Materials; **MEP-** Military Equipment Parking Area

Figure 2-1. Alternative One (Proposed Action) Site Map

2.2 No Action Alternative

The No Action Alternative is required under the Council of Environmental Quality (CEQ) regulations implementing the NEPA, and serves as a baseline or benchmark to be used to compare with the Proposed Action and Alternatives. Under the No Action Alternative, the USAR would not station the Company at JFTB Los Alamitos. The USAR would continue to pay for leased facilities. Recruitment and retention of ASF employees and qualified Soldiers would remain a challenge, impacting the USAR's ability to meet current and future missions and readiness standards.

2.3 Alternatives Considered But Eliminated From Further Analysis

As previously discussed, the USAR used the STAR tool to conduct an analysis of suitable locations for the Company. The Los Angeles/Long Beach area scored 60th overall out of more than 24,429 geographic locations targeted in the STAR analysis. Out of the 59 higher rated locations, 17 were in Southern California (Greater Los Angeles basin). With the exception of March Air Reserve Base (ARB), these locations were excluded as they did not provide appropriate airfields and other aviation specific requirements such as hangar space, access to fuel, and Flight Control. The USAR did consider March ARB in Riverside, California; however, there are no available hangar facilities at March ARB or at the adjacent March USAR Center. This location was eliminated from further analysis because it does not have space available to support the unit. Military Construction (MCAR) of new facilities would be required and is not programmed as part of this project.

Other locations were mostly in Texas and Colorado. These places were not considered as the current personnel within the unit are mostly from the Los Angeles area even though they are stationed 100 miles away in Victorville. Although STAR provides a demographic analysis of the propensity for effective recruiting/manning within a given area, it is not without limitations. While Texas and Colorado may have received a marginally higher ranking, these locations do not provide the basic necessities of an aviation unit and were therefore discounted (Lewis, 2011). The USAR is attempting to build "Pockets of Capability" within geographical regions to ensure long-term career development of its Soldiers. The 11th AVN considers Southern California as one of those Pockets of Capability for aviation units (Lewis, 2010). Additionally, placing the unit at a location other than JFTB Los Alamitos would not allow the units to be collocated, leaving the facility at JFTB Los Alamitos underutilized and requiring continued operational costs to maintain two ASF facilities.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.1 Introduction

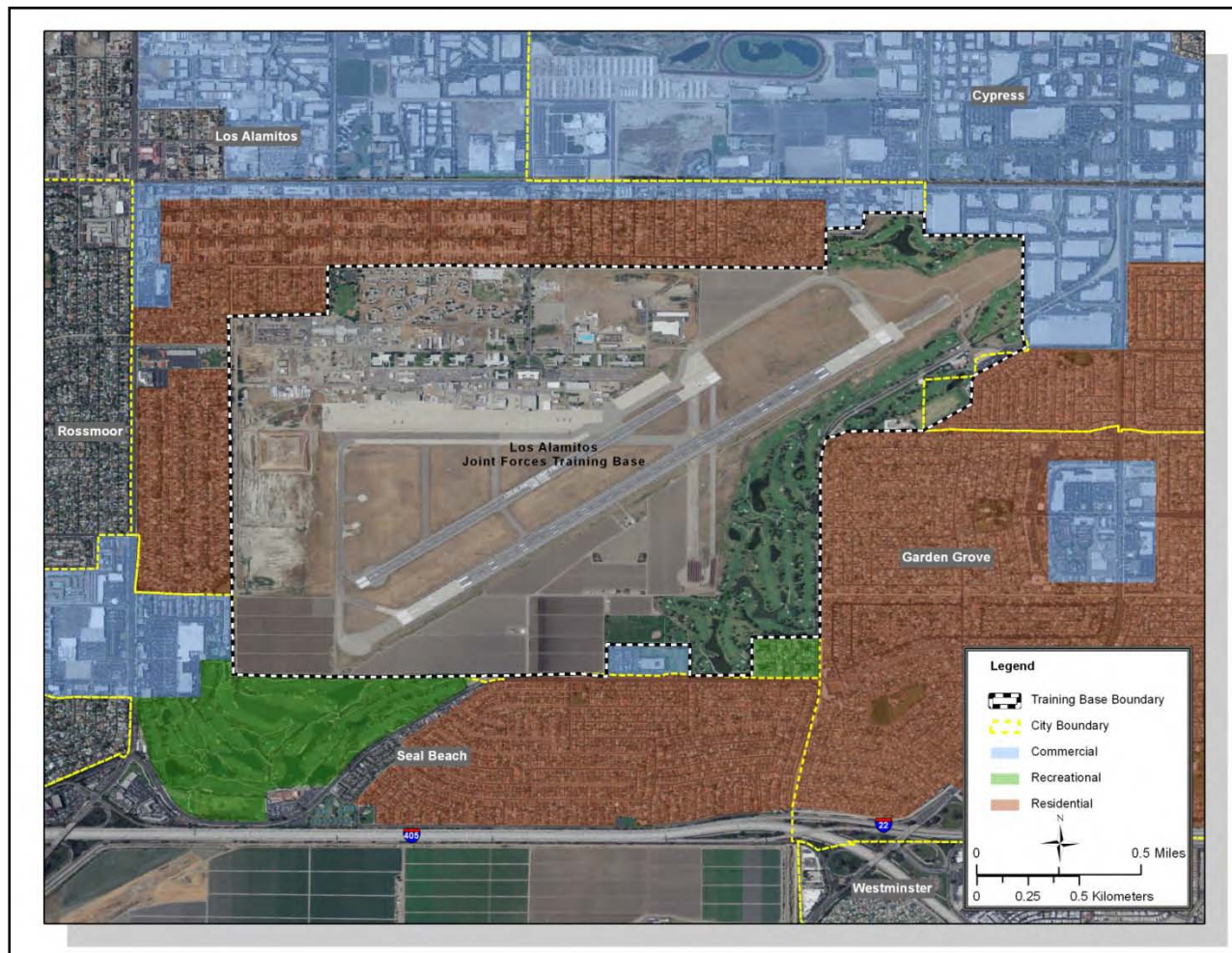
This section describes conditions of, and possible impacts to, environmental resources potentially affected by the Proposed Action and alternatives. The description of the “affected environment” provides a baseline of existing conditions for each resource area being evaluated. Any environmental changes that may result due to the implementation of the Proposed Action or alternatives are identified and evaluated in comparison to the affected environment. Potential changes or impacts to the resources are described as “environmental consequences.” In addition to direct and indirect impacts, cumulative impacts are addressed. Cumulative impacts are as defined by CEQ regulations 40 CFR 1500-1508 as those impacts attributable to the proposed action combined with other past, present, or reasonably foreseeable future impacts regardless of the source.

As stated in CEQ regulations, 40 CFR 1508.14, the “human environment potentially affected” is interpreted comprehensively to include the natural and physical resources and the relationship of people with those resources. The term “environment” as used in this EA encompasses all aspects of the physical, biological, social and cultural surroundings. In compliance with the NEPA and CEQ regulations, the description of the affected environment focuses only on those aspects potentially subject to impacts.

3.2 Land Use

3.2.1 Affected Environment

JFTB Los Alamitos encompasses approximately 1,300 acres in the City of Los Alamitos, Orange County, California. The Installation accounts for roughly 49 percent of the 2,752 acres that make up the City of Los Alamitos. The Installation is bordered on the north by the City of Cypress, on the south by the City of Seal Beach, and on the east by the City of Garden Grove (Figure 3-1). The western and northwestern boundaries of the Installation are bordered by property within the City of Los Alamitos. The area surrounding the Installation includes a mix of urban and suburban land uses. Residential areas abutting the north, south, east, and west are primarily single-family home communities. An industrial area is located along the northeast boundary of the Installation. Residential areas give way to more commercial, industrial, and recreational areas farther from Installation boundaries.



Source: CAARNG, 2010

Figure 3-1. Communities Surrounding JFTB Los Alamitos

Land use in surrounding communities is guided by a variety of policies, plans, and regulations, including: The California Advisory Handbook for Community and Military Compatibility Planning, The Orange County Airport Land Use Commission's Airport Environs Land Use Plan (AELUP) for JFTB Los Alamitos, and local city and community general plans. The AELUP for JFTB Los Alamitos was developed by the Orange County Airport Land Use Commission (ALUC). ALUCs throughout the State of California operate at a county level to review development plans and activities that may affect local airports. The ALUC is responsible for protecting public health, safety, and welfare by minimizing the public's exposure to excessive noise and safety hazards within areas around public airports. Although the ALUC does not have direct land use authority, it plays a pivotal role in providing technical review for local jurisdictions in three categories: Noise, Accident Potential, and Building Height. The AELUP for JFTB Los Alamitos includes information on planning requirements specific to these three categories for areas located in the vicinity of the Installation (Orange County, 2002).

The 2010 Real Property Development Plan (RPDP) for JFTB was created to address the facility program, site infrastructure, and capital outlay needs. The RPDP establishes a 25-year planning framework for the JFTB and includes goals for construction, aesthetics, infrastructure, land use efficiency, and pedestrian-friendly campus design (CAARNG, 2010). Land use at JFTB Los Alamitos includes airfield, airfield operations/support, cantonment/administrative, recreational/open space, and agricultural areas (Figure 3-2). The airfield occupies approximately 465 acres and includes two northeast/southwest runways and associated taxiways and parking aprons. Airfield operations/support areas encompass approximately 240 acres and include hangars, fire and rescue infrastructure, and the control tower. Recreational/open space includes 220 acres of undeveloped open space that is used for training activities, athletic fields, a golf course, and a dog park. Approximately 220 acres are designated as cantonment and include administrative and training facilities, assembly areas, dining facilities, and inactive military housing. There are approximately 190 acres of land along the northeastern and southern boundaries of the Installation out-leased for agricultural purposes (CAARNG, 2007a).



Source: CAARNG, 2007a

Figure 3-2. JFTB Los Alamitos Land Use Areas

In 1973, the DoD implemented the Air Installation Compatible Use Zone (AICUZ) program to protect the health, safety, and welfare of those living or working on or near military air installations by promoting compatible land use development on and off air installations. The current AICUZ study was prepared by the CAARNG in 1994 to address aircraft operations at the Installation and provides land use guidance for the Installation. The AICUZ program is discussed in more detail in Section 3.14, *Health and Human Safety*.

Los Alamitos Army Airfield (LAAAF) is one of the busiest DoD aviation operations in the continental United States. Located in one of the most congested and heavily flown airspace systems in the U.S., the JFTB's control tower is one of the most active in Southern California (CAARNG, 2007b). The JFTB Regulation 95-1 sets forth the rules, regulation, and instruction for operations at the airfield (CAARNG, 2006). The Control Tower is open for operations 15 hours daily Tuesday through Friday, 7:00am-10:00pm PST, and eight hours daily Saturday through Monday, 8:00am-4:00pm PST. Aircraft will not be cleared for flight unless a flight plan has been completed and filed at LAAAF Operations. Rotary wing traffic patterns and procedures are determined by several factors, i.e., the weather, the landing runway used by fixed wing aircraft, traffic, and noise abatement procedures (CAARNG, 2006). Established flight paths for rotary and fixed wing aircraft are shown in Figure 3-3 and in greater detail in the Helicopter Procedure Guide for JFTB Los Alamitos found in Appendix D.

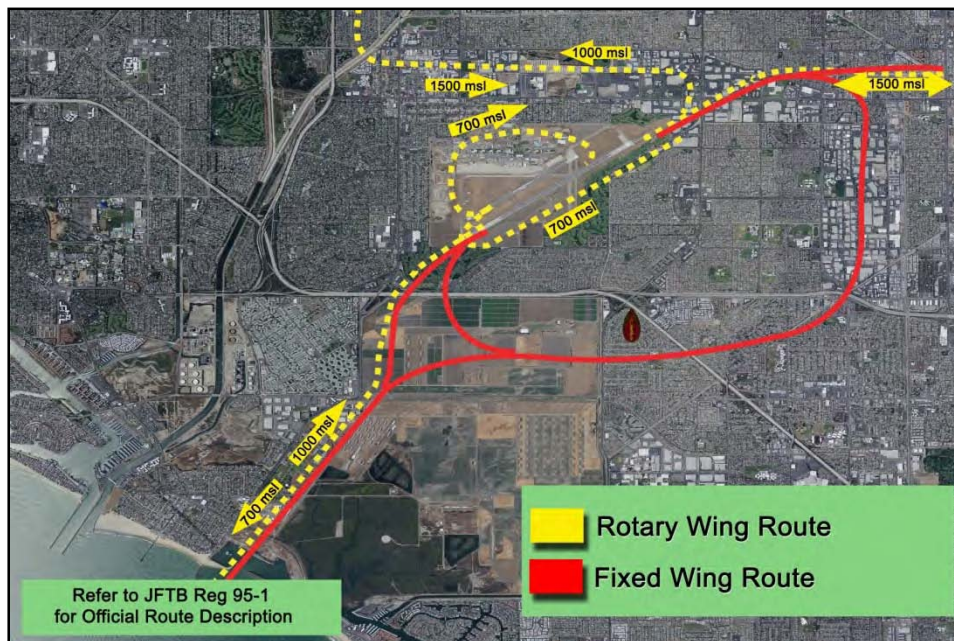


Figure 3-3. JFTB Los Alamitos Flight Paths

3.2.2 Environmental Consequences

Alternative One

Implementation of the Proposed Action would have no direct impact to land use on or surrounding the Installation. The overall use of the Installation is compatible with the unit's mission. JFTB Los

Alamitos already accommodates both fixed-wing and rotary-wing (helicopters) from a variety of military and civilian agencies. The Black Hawk helicopter is already in use at the Installation; there are currently 20 CAARNG Black Hawk helicopters stationed at LAAAF. The Company would occupy existing facilities located at the airfield on JFTB Los Alamitos. The Company's operations are consistent with current use of the airfield and supporting facilities. Pilots would follow existing flight paths used at the JFTB, as established in JFTB 95-1. Other support activities include administrative activities and aircraft storage and maintenance are identical to those already occurring on the Installation.

No Action Alternative

Under the No Action Alternative, the USAR would not station the Company at JFTB Los Alamitos and would not affect current land use on or off of the Installation. The No Action Alternative would not result in any impacts to land use.

Cumulative Impacts

The Proposed Action does not include new construction of permanent facilities or any activities outside current land uses, mission activities, or operations at JFTB Los Alamitos. Even when combined with current and future development on and off the Installation, no significant cumulative impacts to land use are anticipated from implementation of the Proposed Action.

3.3 Topography, Geology, and Soils

3.3.1 Affected Environment

Orange County is located in the southern portion of the Los Angeles Basin, which is within the northern Peninsular Ranges Geomorphic Province. JFTB Los Alamitos is situated in the Downey Plain region of the Los Angeles Basin. The Downey Plain is underlain by northwest-trending syncline, containing unconsolidated sediment and sedimentary rock, with a succession of Quaternary and Tertiary marine, lagoon, and fluvial sediments. Older Cretaceous and Jurassic basement rocks of granite and/or metavolcanic origin are found below the sediments (CAARNG, 2007a). There are two major soil types found on JFTB Los Alamitos, Bolsa silty loam and Hueneme fine sandy loam. The Bolsa series soils are somewhat poorly drained, with slow runoff, and moderately slow permeability. The Hueneme series soils are naturally poorly drained, with slow or very slow runoff, moderately rapid permeability, and unless protected, are subject to periodic flooding (NRCS, 2011). Topography of JFTB Los Alamitos is flat, with an average elevation of 35 feet above mean sea level.

3.3.2 Environmental Consequences

Alternative One

Stationing the Company at JFTB Los Alamitos and subsequent training missions do not involve any ground disturbance. No adverse impacts to topography, geology, or soils are anticipated as a result of the Proposed Action.

No Action Alternative

Under the No Action Alternative, the USAR would not station the Company at JFTB Los Alamitos. The No Action Alternative would not result in any impacts to topography, geology, or soils.

Cumulative Impacts

The Proposed Action would not result in any impacts to topography, geology, or soils. Therefore, even when combined with future development on and off the Installation, no cumulative impacts are anticipated.

3.4 Hydrology and Water Resources

3.4.1 Affected Environment

Floodplains

The designated frequency for floodplain identification used by the Federal Emergency Management Agency (FEMA) is the 100-year flood. The 100-year flood is more accurately referred to as the one percent annual exceedance probability flood, because it is a flood that has a one percent chance of being equaled or exceeded in any single year. The 100-year floodplain is an area where the level of flood water is expected to be equaled or exceeded every 100 years on average. The FEMA floodplain maps do not include JFTB Los Alamitos; however, the areas surrounding the JFTB are located outside of designated 100-year floodplains (CAARNG, 2010).

Coastal Zone

The federal Coastal Zone Management Act (CZMA) of 1972 (Title 16 U.S.C, Sections 1451 *et seq.*) provides management of the nation's coastal resources and balances economic development with environmental conservation by preserving, protecting, developing, and where possible restoring or enhancing the nation's coastal zone. The California coastal zone generally extends 1,000 yards inland from the mean high tide line (NOAA, 2011). JFTB Los Alamitos is not located within a coastal zone management area.

Groundwater

The JFTB is located over the Central Basin of the Los Angeles Coastal Basin in the Orange County Groundwater Basin. Groundwater measurements at the JFTB have shown that the average depth to groundwater ranges from 8 to 16 feet below ground surface, depending on the amount of rainfall and time of year (CAARNG, 2007a). The groundwater aquifer beneath the Base is not used for potable water supply; however, it is a beneficial-use aquifer which supplies water for agricultural production at the Base (CAARNG, 2010). Potable water supply is described in Section 3.12, *Utilities*.

Surface Water

JFTB Los Alamitos is located within the Westminster Watershed, which covers 74.1 square miles in Orange County. Surface water at the JFTB includes the Rossmoor Storm Channel, an unlined

drainage ditch which runs along the north side of the Base and captures storm drainage from the flightline and main roadways of the JFTB. Water in the Rossmoor Channel flows south and discharges into the Los Alamitos Retention Basin, the San Gabriel River, and eventually the Pacific Ocean. Runoff in the northeastern quadrant of the JFTB Los Alamitos drains to the Bolsa Chica Channel, which flows south into Anaheim Bay (CAARNG, 2010). There are no naturally occurring surface water features located on JFTB Los Alamitos. However, there are several small artificial ponds located within the golf course on the southeastern portion of the Installation. There are no surface water features located within the area surrounding Building 912 or ECS 16.

3.4.2 Environmental Consequences

Alternative One

Implementation of Alternative One is not anticipated to result in any impacts to hydrology or water resources. There are no surface water features located on the Site and it is not located within a 100-year floodplain or coastal zone management area. The Proposed Action does not include any construction or other ground disturbing activities and operation of Black Hawk helicopters would have no direct or indirect impacts on water resources. Measures to prevent hazardous materials and petroleum products from entering groundwater or surface water are included in Section 3.13, *Hazardous and Toxic Substances*.

No Action Alternative

Under the No Action Alternative, the USAR would not station the Company at JFTB Los Alamitos and therefore, there would be no impacts to hydrology or water resources.

Cumulative Impacts

No impacts to water resources are anticipated as a result of the Proposed Action; therefore, stationing the Company at JFTB Los Alamitos will not contribute to cumulative impacts to water resources.

3.5 Biological Resources

3.5.1 Affected Environment

Vegetation

JFTB Los Alamitos is located in a very urban area and there are no naturally occurring plant communities on or immediately surrounding the Installation. The majority of the Installation is developed with buildings, concrete, or asphalt features. Areas where vegetation exists, such as lawns and golf courses, contain non-native grasses and/or non-native herbaceous plants. The Fremont cottonwood (*Populus fremont*) is one of very few native trees at JFTB Los Alamitos. Common vegetation found on the Installation includes, but is not limited to, crabgrass (*Digitaria sanguinalis*), Bermuda grass (*Cynodon dactylon*), black mustard (*Brassica nigra*), yellow sweet clover (*Melilotus indicus*), red-stemmed filaree (*Erodium cicutarium*), slender wild oat (*Avena barbata*), and Italian ryegrass (*Lolium multiflorum*). Areas of the Installation used for agricultural purposes contain crop species, such as strawberries.

Wildlife

The highly developed nature of JFTB Los Alamitos and lack of suitable habitat limits the wildlife occurring within the boundaries of the Installation. Common mammal species known or expected to occur on the Installation include Botta's pocket gopher (*Thomomys bottae*), striped skunk (*Mephitis mephitis*), coyote (*Canis latrans*), raccoon (*Procyon lotor*), Virginia opossum (*Didelphi virginiana*), and feral cats (*Felis catus*) (CAARNG, 2007a). A variety of bird species are known to occur on the Installation, including some migratory bird species. Common species include the American crow (*Corvus brachyrhynchos*), northern mockingbird (*Mimus polyglotos*), black phoebe (*Saynoris nigricans*), house finch (*Carpodacus mexicanus*), mourning dove (*Zenaida macroura*), and American kestrel (*Falco sparverius*) (CAARNG, 2007a). Although there are no naturally occurring surface water features on the Installation, there are several artificial ponds within the golf course, and a drainage channel along the western boundary of the Installation. Additionally, the wet season (typically November - April) produces some ephemeral wet areas (shallow standing water) within open grassy areas of the Installation. These areas may provide resting and foraging habitat for a variety of species, including the great blue heron (*Ardea Herodias*), great egret (*Ardea alba*), long-billed curlew (*Numenius americanus*), whimbrel (*Numenius phaeopus*), red-tailed hawks (*Buteo jamaicensis*), and loggerhead shrike (*Lanius ludovicianus*) (CAARNG, 2007a).

The DoD prepared a management plan in cooperation with Partners-In-Flight (PIF) for bird species of conservation concern (DoDPIF, 2002). Initially, the focus of bird species of conservation concern was on species that breed in temperate North America and winter in the tropics (neotropical migrants) that were experiencing population declines. Habitat loss, degradation, and fragmentation of the temperate breeding and tropical wintering grounds are likely the major reasons for these declines (Flather and Sauer 1996, Sherry and Holmes, 1996) as well as the loss of important stop-over habitat used during migration (Moore et al., 1993). In response to declines in bird populations, Executive Order (EO) 13186, *Responsibilities of Federal Agencies to Protect Migratory Birds*, was issued on 10 January 2001. This EO requires Federal agencies to evaluate the effects of their actions and plans on migratory bird species of concern. Species of concern are those identified in 1) *Migratory Nongame Birds of Management Concern in the United States* (USFWS 1995, 2002), 2) priority species identified by established plans such as those prepared by PIF, and 3) listed species in 50 CFR 17.11. The focus of these species of concern was expanded to include all landbirds breeding in the continental U.S. (DoDPIF, 2004) as well as some aquatic bird species. In addition to the strategic plan (DoDPIF, 2002), lists of bird species of conservation concern were prepared by Conservation Region. JFTB Los Alamitos is located in Conservation Region 32. Table 3-1 includes the bird species of special concern that occur within Region 32.

Table 3-1. Bird Species of Special Concern Occurring in Conservation Region 32

Black-footed Albatross (<i>Pheobastria nigripes</i>)	Spotted Owl (<i>occidentalis</i> ssp.)
Pink-footed Shearwater (<i>Puffinus creatopus</i>)	Black Swift (<i>Cypseloides niger</i>)
Black-vented Shearwater (<i>Puffinus opisthomelas</i>)	Costa's Hummingbird (<i>Calypste costae</i>)
Ashy Storm-Petrel (<i>Oceanodroma homochroa</i>)	Allen's Hummingbird (<i>Selasphorus sasin</i>)
Bald Eagle (<i>Haliaeetus leucocephalus</i>)	Lewis's Woodpecker (<i>Melanerpes lewis</i>)

Peregrine Falcon (<i>Falco peregrines</i>)	Nuttall's Woodpecker (<i>Picoides nuttallii</i>)
Yellow Rail (<i>Coturnicops noveboracensis</i>)	Loggerhead Shrike (<i>Lanius ludovicianus</i>)
Black Rail (<i>Laterallus jamaicensis</i>)	Island Scrub-Jay (<i>Aphelocoma insularis</i>)
Snowy Plover (<i>Charadrius alexandrinus</i>)	Yellow-billed Magpie (<i>Pica nuttalli</i>)
Mountain Plover (<i>Charadrius montanus</i>)	Oak Titmouse (<i>Baeolophus inornatus</i>)
Black Oystercatcher (<i>Haematopus bachmani</i>)	Cactus Wren (<i>Campylorhynchus brunneicapillus</i>)
Whimbrel (<i>Numenius phaeopus</i>)	Leconte's Thrasher (<i>Toxostoma lecontei</i>)
Long-billed Curlew (<i>Numenius americanus</i>)	Yellow Warbler (<i>brewsteri</i> ssp.)
Marbled Godwit (<i>Limosa fedoa</i>)	Common Yellowthroat (<i>sinuosa</i> ssp.)
Red Knot (<i>roselaari</i> ssp.)	Spotted Towhee (<i>clementae</i> ssp.)
Short-billed Dowitcher (<i>Limnodromus griseus</i>)	Black-chinned Sparrow
Gull-billed Tern (<i>Sterna nilotica</i>)	Song Sparrow (<i>graminea</i> ssp.)
Black Skimmer (<i>Rynchops niger</i>)	Song Sparrow (<i>maxillaries</i> ssp.)
Xantus's Murrelet (<i>Synthliboramphus hypoleucus</i>)	Song Sparrow (<i>pusillula</i> ssp.)
Cassin's Auklet (<i>Ptychoramphus aleuticus</i>)	Song Sparrow (<i>samuelis</i> ssp.)
Yellow-billed Cuckoo (<i>Coccyzus americanus</i>)	Tricolored Blackbird (<i>Agelaius tricolor</i>)
Flammulated Owl (<i>Otus flammeolus</i>)	Lawrence's Goldfinch (<i>Spinus lawrencei</i>)
Burrowing Owl (<i>Athene cunicularia</i>)	

Source: USFWS, 2008

Special Status Species

The federal Endangered Species Act (ESA) protects federally listed animal and plant species and their critical habitats. The U.S. Fish and Wildlife Service (USFWS) maintains a listing of species that are considered threatened, endangered, proposed, or candidates under the ESA. An endangered species is defined as any species in danger of extinction throughout all or a significant portion of its range. A threatened species is defined as any species likely to become an endangered species in the foreseeable future. Candidate species are those that the USFWS has enough information on file to propose listing as threatened or endangered, but listing has been precluded by other agency priorities. Although Federal agencies are not required by the ESA to consider candidate species, AR 200-1 requires the Army to consider candidate species in all actions that may affect them. The Bald and Golden Eagle Protection Act (BGEPA) provides federal protection to bald and golden eagles, including their parts, nests, or eggs. Table 3-2 contains a list of the federal and state listed threatened and endangered species occurring in the U.S. Geological Survey (USGS) Los Alamitos Topographic Quadrangle. No federal or state threatened or endangered species are known to occur at JFTB Los Alamitos. An area in the northwest corner of the Installation and two locations between the airstrips contain suitable habitat for the burrowing owl, however no owls have been observed (CAARNG, 2007a).

Table 3-2. Threatened and Endangered Species Occurring in the USGS Los Alamitos Quadrangle

Common Name	Scientific Name	State Status	Federal Status
Braunton's milk-vetch	<i>Astragalus brauntonii</i>	E	E
Thread-leaved brodiaea	<i>Brodiaea filifolia</i>	T	T
Salt-marsh bird's beak	<i>Cordylanthus maritimus ssp. maritimus</i>	E	E
California Orcutt grass	<i>Orcuttia californica</i>	E	E
Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	E	E
Western snowy plover	<i>Charadrius alexandrinus nivosus</i>	T	T
Western yellow-billed cuckoo	<i>Coccyzus americanus occidentalis</i>	E	N/A
Brown pelican	<i>Pelecanus occidentalis</i>	E	E
Least Bell's vireo	<i>Vireo bellii pusillus</i>	E	E
Belding's savannah sparrow	<i>Passerculus sandwichensis beldingi</i>	E	N/A
Coastal California gnatcatcher	<i>Poliophtila californica californica</i>	T	T
California least tern	<i>Sterna antillarum browni</i>	E	E
Light-footed clapper rail	<i>Rallus longirostris levipes</i>	E	E
San Diego fairy shrimp	<i>Branchinecta sandiegonensis</i>	N/A	E
Riverside fairy shrimp	<i>Streptocephalus woottoni</i>	N/A	E

Note: E = Endangered, T = Threatened, and N/A = Not Applicable
Source: CAARNG, 2010

Critical Habitat

Critical habitat is defined as a specific geographic area that is essential for the conservation of a federally threatened or endangered species and that may require special management and protection. Critical habitat may include areas that are currently not occupied by the species, but are necessary for its recovery. There is no designated critical habitat located on JFTB Los Alamitos.

Wetlands

The U.S. Congress enacted the Clean Water Act (CWA) in 1972 to restore and maintain the chemical, physical, and biological integrity of the Nation's waters (33 U.S.C. 1251 et seq.). Section 404 of the CWA delegates jurisdictional authority over wetlands to the Corps of Engineers and the Environmental Protection Agency (EPA). Waters of the U.S. protected by the CWA include rivers, streams, estuaries, as well as most ponds, lakes, and wetlands. The Corps of Engineers and the EPA jointly define wetlands as "areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions". Reconnaissance surveys were conducted in 2006 to identify possible wetlands at JFTB Los Alamitos. No wetlands were identified as a result of the reconnaissance surveys

(CAARNG, 2007a). However, the USFWS National Wetlands Inventory (NWI) identifies a small freshwater emergent wetland area located in the northeast corner of the airfield (Figure 3-4).



Source: USFWS, 2011

Figure 3-4. National Wetlands Inventory Map of JFTB Los Alamitos

3.5.2 Environmental Consequences

Alternative One

The Proposed Action would have no direct or indirect long term or short term adverse impacts to biological resources on JFTB Los Alamitos. No ground disturbing activities resulting in loss of habitat would occur because the Company would use existing buildings and airfield infrastructure to satisfy mission requirements. Implementation of the Proposed Action would have no impact on federal or state listed threatened and endangered species or wetlands. As with existing airfield operations at the Installation, there is the possibility of wildlife/aircraft strike incidents during flight. However, the limited number of additional flights that would result from implementation of the Proposed Action is not anticipated to create a significant increase in this risk and would therefore have no significant impact. Further information on wildlife/aircraft strike potential is provided in Section 3.14, *Human Health and Safety*.

No Action Alternative

Under the No Action Alternative, the USAR would not station the Company at JFTB Los Alamitos. The No Action Alternative would have no direct or indirect long term or short term adverse impacts on biological resources.

Cumulative Impacts

No biological resources would be disturbed as a result of the Company performing administrative and maintenance activities at the Installation. The potential for wildlife/aircraft strikes during helicopter operations when combined with the Installation's existing airfield operations is not anticipated to result in any significant cumulative impacts. Any wildlife killed during aviation activities is reported to the JFTB Los Alamitos Environmental Office for proper identification and documentation. No significant cumulative impacts are anticipated as a result of the Proposed Action.

3.6 Cultural Resources

3.6.1 Affected Environment

Cultural resources is a broad term that includes all aspects of human activities, including material remains of the past and the beliefs, traditions, rituals and cultures of the present. As mandated by law, all federal installations and personnel must participate in the preservation and stewardship needs of archaeological and cultural resources and must consider potential impacts to these resources prior to any installation undertaking. Resources include historic properties as defined by the National Historic Preservation Act (NHPA), cultural items as defined by the Native American Graves Protection and Repatriation Act (NAGPRA), archaeological resources as defined by the Archaeological Resources Protection Act (ARPA), sacred sites as defined by EO 13007, to which access is provided under the American Indian Religious Freedom Act (AIRFA), significant paleontological items as described by 16 United States Code (USC) 431-433 (Antiquities Act of 1906) and collections as defined in 36 CFR 79, Curation of Federally Owned and Administrated Archaeological Collections (DA, 2007).

According to the *Integrated Cultural Resources Management Plan for the California Army National Guard 2005-2009*, there are no archaeological or sacred sites located on JFTB Los Alamitos (CAARNG, 2004). Neither Building 912 nor ECS 16 are eligible for listing on the National Register of Historic Places (NRHP). Extensive research on the history of the Installation and an archaeological survey was completed in 2001 and determined that JFTB Los Alamitos did not contain any historic districts eligible for inclusion in the NRHP. Concurrence from the California State Historic Preservation Office was received in 2007 (CAARNG, 2007a).

3.6.2 *Environmental Consequences*

Alternative One

Implementation of the Proposed Action will not result in any impacts to cultural resources. There will be no ground disturbing activities and neither of the buildings to be used by the Company is eligible for the NRHP.

No Action Alternative

Under the No Action Alternative the USAR would not station the Company at JFTB Los Alamitos. The No Action Alternative would have no direct or indirect adverse impacts on cultural resources.

Cumulative Impacts

Implementation of the Proposed Action when combined with past, present, and anticipated future projects on the Installation and in surrounding areas would not be expected to result in any cumulative impacts to cultural resources.

3.7 Air Quality

3.7.1 Affected Environment

The primary regulatory framework regarding air quality was established by the adoption of the Clean Air Act (CAA) (42 U.S.C 7401-7671q) in 1963 and amended in 1970 and 1990. The CAA allows the EPA to set limits on a number of air pollutants. The CAA requires the EPA to establish primary and secondary National Ambient Air Quality Standards (NAAQS) for pollutants that may be harmful to public health and the environment. Primary standards protect public health, including the health of sensitive populations, such as asthmatics, children, and the elderly; and secondary standards protect public welfare, including protections against decreased visibility, damage to animals, crops, vegetation, and buildings (USEPA, 2010b). Areas where criteria pollutant concentrations are below NAAQS are designated as attainment areas and areas where criteria pollutant concentrations meet or exceed NAAQS are designated as nonattainment areas. As shown in Table 3-3, the NAAQS (40 CFR Part 50) established threshold values for six criteria pollutants, including carbon monoxide (CO); nitrogen oxides (NO_x), particularly nitrogen dioxide (NO₂); ozone (O₃); sulfur dioxide (SO₂); lead (Pb); and particulate matter, including very fine particulate matter (PM_{2.5}) and fine particulate matter (PM₁₀).

JFTB is located within the California South Coast Air Basin (SCAB), which includes all of Orange County and parts of Los Angeles, Riverside, and San Bernardino counties. Projects proposed within the SCAB that include any air emitting activity are evaluated on a case-by-case basis for compliance and conformity with state air quality plans. In addition, Federal actions at JFTB must also demonstrate conformance with federal conformity guidelines. JFTB has prepared a Sustainability Analysis Report and Model (CAARNG, 2007a), which includes a comprehensive baseline assessment, significance thresholds, and sustainability analysis. The Report/Model

provides a foundation for future NEPA and California Environmental Quality Act (CEQA) analysis and documentation.

Of the six criteria pollutants, the SCAB has fallen into nonattainment status of the NAAQS for O₃, PM₁₀ and PM_{2.5}, maintenance status for CO and NO₂, and maintains attainment status for SO₂ and Pb. The severity of the nonattainment status is considered “extreme” for 8-hour ozone and “serious” for PM₁₀. With regard to the CAAQS, the SCAB has fallen into nonattainment status for O₃, PM₁₀, PM_{2.5} and NO₂ and maintains attainment status for CO, SO₂, Pb, and sulfates. Table 3-4 summarizes this information.

Table 3-3. NAAQS and Monitored Air Quality Standards

Pollutant and averaging time		Primary NAAQS ^a	Secondary NAAQS ^a
CO	8-Hour Maximum ^b (ppm)	9	None
	1-Hour Maximum ^b (ppm)	35	None
Lead	Rolling 3-Month Average ^c (µg/m ³)	0.15	0.15
	Quarterly Average (µg/m ³)	1.5	0.15
NO₂	Annual Arithmetic Mean (ppm)	0.053	0.053
	1-Hour (ppm)	0.1	None
PM₁₀	24-Hour Maximum ^f (µg/m ³) ^d	150	150
PM_{2.5}	Annual Arithmetic Mean ^e (µg/m ³)	15	15
	24-Hour Maximum ^f (µg/m ³)	35	35
O₃	8-Hour Maximum ^g (ppm)	0.075	0.075
SO₂	Annual Arithmetic Mean (ppm)	0.03	0.5
	24-Hour Maximum ^b (ppm)	0.14	None

^a Source: USEPA, 2010b; ^b Not to be exceeded more than once/year; ^c Final rule signed 15 Oct 2008; ^d The 3-year average of the weighted annual mean of 24-hour PM₁₀ concentrations not to exceed 150µg/m³ more than once/yr; ^e The 3-year average of the weighted annual mean PM_{2.5} concentrations from single or multiple community-oriented monitors must not exceed 15.0µg/m³; ^f The 3-year average of the 98th percentile of 24-hour concentrations at each population-oriented monitor within an area must not exceed 35µg/m³; ^g The 3-year average of the fourth-highest daily maximum 8-hour average O₃ concentrations measured at each monitor within an area over each year must not exceed 0.075 ppm (effective 27 May 2008)

NAAQS-National Ambient Air Quality Standards; **CO**-carbon monoxide, **ppm**-parts per million; **µg/m³**-micrograms per cubic meter of air; **NO₂**-nitrous oxides; **PM₁₀**-particulate matter, fine; **PM_{2.5}**-particulate matter, very fine; **O₃** – ozone; **SO₂**-sulfur dioxide; **USEPA**-United States Environmental Protection Agency

Table 3-4. NAAQS and CAAQS Status – South Coast Air Basin (Orange County)

Pollutant	NAAQS Status	CAAQS Status
Ozone (O ₃)	Non-attainment (extreme)	Non-attainment (extreme)
Particulate Matter, fine (PM ₁₀)	Non-attainment (serious)	Non-attainment
Particulate Matter, very fine (PM _{2.5})	Non-attainment	Non-attainment
Carbon Monoxide (CO)	Maintenance ¹	Attainment
Nitrogen Dioxide (NO ₂)	Maintenance	Non-attainment
Sulfur Dioxide (SO ₂)	Attainment	Attainment
Lead (Pb)	Attainment	Attainment
Sulfates	Not applicable	Attainment

¹ As of September 27, 2010, all Carbon Monoxide areas were redesignated to maintenance areas; Source: CARB 2011

In California, EPA has delegated authority to prepare the State Implementation Plan (SIP) to CARB, which, in turn, has delegated that authority to individual air districts throughout the state. The South Coast Air Quality Management District (SCAQMD) has jurisdiction over air quality issues in the SCAB and administers air quality regulations developed at the federal, state, and local levels.

The “approved” emission inventory for the California SIP is presented in the 2007 Air Quality Management Plan (AQMP). The SIP/AQMP budget estimates emissions from stationary, area, and mobile sources. The majority of the emissions from JFTB are aircraft related, but are not tracked separately; they are merely components of the larger source categories within the SIP/AQMP emission budgets.

In the development of the emissions inventories for the 1994, 1997, 1999, 2003, and 2007 AQMP, SCAQMD assumed that EPA would adopt new regulations to control aircraft engine emissions below the existing limits, which did not occur. The 1994, 1997, 1999, and 2007 AQMP baseline emissions budget for military and general aviation aircraft operations at the JFTB are shown in Table 3-5. In addition, the 2007 AQMP assumed that no changes in future aircraft emissions would occur, also shown in Table 3-5.

When the emissions budgets presented in Table 3-5 are compared with the actual 2006 emissions for JFTB operations in presented in Table 3-6, it is evident that the actual emissions are in excess of the budgeted values. This situation has resulted in the initiation of consultation with SCAQMD to adopt the new baseline emissions for JFTB operations. As previously discussed, CAARNG submitted a request to the SCAQMD to modify and update the baseline emissions allocated to JFTB operations in the AQMP. In response, SCAQMD acknowledged the modification, but stated that they would be unable to incorporate these changes because the plan was already nearing its final form. At this point, CAARNG and JFTB must maintain an open dialogue with SCAQMD in order to continue working toward updating JFTB’s baseline emissions in the next revision to the AQMP and discuss the best way to address emissions from upcoming projects that until the JFTB baseline emissions are revised.

Table 3-5. Baseline Emissions Established in the 1994, 1997, and 2007 AQMPs for JFTB Aircraft Operations

Air Emissions (Pounds/Day)							
Year	CO	NO _x	SO _x	TOG	VOC	PM ₁₀	PM _{2.5}
1994	1,436	321	25.8	329.9	278.4	300.8	-
1997	166	9.2	0.70	24.2	-	-	-
2007	215	9.2	0.70	29.8	26.7	0.00	0.00
2010*	215	9.2	0.70	29.8	26.7	0.00	0.00
2020*	215	9.2	0.70	29.8	26.7	0.00	0.00
2030*	215	9.2	0.70	29.8	26.7	0.00	0.00

Source: CAARNG, 2007a

*Note: 2007 AQMP were used to project emissions for 2010, 2020, and 2030. **CO**-carbon monoxide; **NO_x**-nitrogen oxides; **SO_x**-sulfur oxide; **TOG**-Total Organic Gases; **VOC**-Volatile Organic Compound; **PM₁₀**-particulate matter, fine; **PM_{2.5}**-particulate matter, very fine.

Table 3-6. 2006 Baseline Emissions for Existing Conditions at JFTB

Air Emissions (Pounds/Day)					
Operations	CO	NO _x	SO _x	NMHC	PM ₁₀
Aircraft Operations	375.96	85.45	7.55	179.77	33.93
Ground Support Equipment	3.16	1.09	2.60	14.76	0.93
Stationary Sources	0.46	0.05	0.01	0.58	0.04
Natural Gas Usage	2.58	0.52	0.04	9.57	0.55
Non-Permitted Organics	0.00	4.09	0.00	0.00	0.00
Fuel Storage Facilities Emissions	0.00	5.06	0.00	0.00	0.00
Motor Vehicles	1.21	0.08	0.002	0.30	0.01
Total (pounds/day)	383.37	96.34	10.20	204.98	35.46
Total (tons/year)	69.35	18.25	1.83	36.5	7.3

Source: CAARNG, 2007a

CO-carbon monoxide; **NO_x**-nitrogen oxides; **SO_x**-sulfur oxide; **NMHC**- Non-Methane Hydrocarbons; **PM₁₀**-particulate matter, fine

Federal and state laws and regulations also define a group of pollutants called toxic air contaminants (TACs). These pollutants are regulated by the National Emissions Standards for Hazardous Air Pollutants (NESHAPS) section of the CAA, various state laws and regulations, state air toxics act (Assembly Bill [AB] 1807; AB 2588; and Senate Bill [SB] 1731 programs), and SCAQMD Regulations X and XIV. Exposure to these pollutants can cause or contribute to cancer, birth defects, genetic damage, and other adverse health effects. The source and effects of hazardous air pollutants are generally local, rather than regional. Evaluation is based on case studies, not standards for ambient concentration. Examples of toxic air contaminants include benzene, asbestos, carbon tetrachloride, ammonia, hydrogen sulfide, hydrogen cyanide, and

methane. No CAAQS for any TACs have been established for the SCAB (CARB 2011). TACs are discussed in further detail below.

In 2007, JFTB commissioned a sustainability model by Marstel-Day, LLC and the U.S. Army Corps of Engineers Mobile District to determine the size and scope of mission changes or new base projects that would result in a significant, adverse effect under NEPA/CEQA, and thus require the preparation of an EIS or possibly an Environmental Impact Report (EIR) (e.g., a project requiring state funding which would invoke CEQA compliance). The Marstel-Day Team developed and integrated a series of models based on widely accepted methods and tailored to JFTB operations to simulate how changes in aircraft flight operations may impact noise, air quality, and safety significance thresholds.

3.7.2 Environmental Consequences

Alternative One

Section 176(c) of the Clean Air Act requires that federal agencies ensure their actions are consistent with the act and applicable state air quality management plans. The General Conformity Rule, promulgated by the EPA at 40 CFR Part 51, calls for a formal conformity analysis for federal actions occurring in non-attainment areas or in certain designated maintenance areas when the total direct and indirect emissions of non-attainment pollutants or their precursors exceed specified thresholds.

Under NEPA, project proponents must conduct a level of potential air quality impact review appropriate to the action. The SCAQMD has developed emission thresholds that can be used as a screening tool to estimate if a project's emissions will significantly impact air quality. Thresholds have been developed for construction and operational emissions by pollutant. Emissions greater than the thresholds identified are considered to be significant and typically warrant further air quality analysis, NEPA analysis and/or mitigation requirements.

Emissions and emission sources evaluated for this EA include aircraft emissions, other operational emissions, and TACs and utilize the 2007 JFTB Sustainability Model, as applicable, to determine the likelihood of a significant air quality impact resulting from implementation of the Proposed Action.

Aircraft Emissions

The air quality assessment is limited to an evaluation of criteria pollutants (i.e., those pollutants for which EPA or CARB has set threshold criteria); toxic air contaminants are not typically generated by aircraft operations. For this analysis, the following criteria pollutants were considered: Ozone, CO, NO₂, SO₂, PM₁₀, and PM_{2.5}. Because ozone is a secondary pollutant (i.e., it is not directly emitted but is formed in the atmosphere), emissions of VOC and NO_x, which react in the presence of sunlight to form ozone, were used to assess impacts on ozone levels.

The 2007 JFTB Sustainability Model estimates airfield operation related emissions using an Emissions and Dispersion Modeling System (EDMS) model, a combined emissions inventory and

dispersion model used for assessing air quality at civilian airports and military air bases. The model incorporates both EPA-approved emissions inventory methodologies and dispersion models to ensure that analyses performed conform to EPA guidelines. The model includes emissions and dispersion calculations, a comprehensive list of aircraft engines, aerospace ground support equipment, auxiliary power units, and vehicular and stationary source emission factor data. The model also incorporates options for modifying some data to accurately represent site specific characteristics at different airfield locations, and also allows the user to add customized aircraft types to the system database. EDMS is the model required by the EPA and the Federal Aviation Administration (FAA) for evaluating emissions from airports and military bases.

With regard to additional flight operations, the Proposed Action includes 2 flights on Monday, 3 flights on Tuesday, 3 flights on Wednesday, 3 flights on Thursday, 2 flights on Friday, 1 flight on Saturday, and 1 flight on Sunday totaling 15 additional flights per week or 780 additional flights per year. Each flight lasts an average 1½ hours for a total of 22½ hours per week or 1,170 hours per year. Table 3-7 shows the 2006 Baseline Emissions as well as the incremental and percent increases in emissions resulting from increasing the UH-60 flight operations at JFTB by 11.5 percent.

The significance thresholds shown in Table 3-7 are used as a screening tool to estimate whether project emissions will negatively impact air quality. Emissions greater than the thresholds identified are considered to be significant and will warrant further air quality analysis. In all cases, when the increased emissions generated from the additional 780 UH-60 flight operations are compared with the significance thresholds, it is apparent that the Proposed Action will have a minimal impact on the overall emissions at the JFTB.

Table 3-7. Aircraft Operations Emissions

Scenarios	Air Emissions (Pounds/Day)				
	CO	NO _x	SO _x	NMHC	PM ₁₀
2006 Baseline emissions (from Table 3-6)	375.96	85.45	7.55	179.77	33.93
Increase from Proposed Action	13.78	5.20	0.38	0.84	3.67
Significance Threshold (allowable increase in emissions above baseline levels)	550	55	150	55	150
Baseline plus Proposed Action	389.74	90.65	7.93	180.61	37.60
Percent Change	3.67%	6.09%	5.03%	0.47%	10.82%

Source: Application of Sustainability Model found in (CAARNG, 2007a) for 780 additional UH-60 flights at JFTB per year. **CO**-carbon monoxide; **NMHC**- Non-Methane Hydrocarbons; **NO_x**-nitrogen oxides; **SO_x**-sulfur oxide; **PM₁₀**-particulate matter, fine

Other Operational Emissions

Other operational emissions that could result from the Proposed Action include motor vehicle emissions and stationary source emissions at JFTB. The URBEMIS portion of the 2007 JFTB Sustainability Model was used to assess potential air quality impacts from these other sources. The URBEMIS model uses the CARB's EMFAC2007 model for on-road vehicle emissions and the

OFFROAD2007 model for off-road vehicle emissions. The model includes variables for vehicle type, weight, type of fuel (gasoline or diesel) and whether or not the vehicle has a catalyst. Trip details such as average speed, length, and frequency are factored into the model for various types of trips (e.g.; home to work, home to shop, commercial based, commercial based customer, and commercial based non-work). All trips are presumed to occur on paved roads. The ambient temperature and percent of hot and cold starts is also reflected. The Proposed Action also includes the use of additional privately owned vehicles (POVs) for the 29 full-time personnel and 58 Reservists, as well as 2 HMMWVs, 3 HEMTTs, 1 flatbed trailer, and 3 fueling support trailers.

Stationary source emissions are generated from equipment that typically requires a permit from the SCAQMD. Existing stationary sources at each site, such as boilers and furnaces, internal combustion engines, and fuel storage and dispensing facilities, were already included in the environmental baseline. No additional stationary sources will be required to support the Proposed Action.

In order to account for the emissions that will occur from operational activities other than the additional UH-60 flights, the land use category variable in the URBEMIS model was adjusted. The light industrial land use category, which most closely matches the types of activities that occur within Building 912 and ECS 16, was increased by 20 percent to account for additional activities. As such, a unit factor of 30,000 SF, which equates to 20 percent of the 150,000 SF of existing space at Buildings 912 and ECS 16, was used to quantify the additional emissions attributable to the Proposed Action. Table 3-8 shows the additional emissions that occur from the area sources and motor vehicle trips associated with the added Black Hawk flights. Table 3-8 includes “threshold values” that were derived from this model adjustment and can be used by JFTB to determine the size of a project would trigger an EIS. That is, any project that exceeds the threshold levels should be interpreted as having the potential to cause significant, adverse impacts to air quality and trigger an EIS.

Table 3-8. Operational Emissions for Light Industrial Development

Industrial (Light)	Units	CO	NO _x	ROG	PM ₁₀
Area Sources	lbs/day/1,000 SF	1.46	0.81	0.20	0.00
Operational (Vehicles)	lbs/day/1,000 SF	1.07	0.1	0.09	0.08
Sum of Area and Operational	lbs/day/1,000 SF	2.53	0.91	0.29	0.08
Proposed Action Equivalent of 30,000 SF		75.9	27.3	8.7	2.4
Threshold Value	1,000 SF	217	60	189	1,875

Source: Application of Sustainability Model found in (CAARNG, 2007a) for 30,000 SF of light industrial land use

ROG-reactive organic gases; **NO_x**-nitrogen oxides; **CO**-carbon monoxide; **PM₁₀**-particulate matter, fine

Toxic Air Contaminants

TACs are also emitted by construction and operating equipment, but unlike criteria pollutants, TACs do not have established emission-based significance thresholds. The primary TAC constituent that is evaluated for potential health risks is referred to as diesel particulate matter or DPM and is found in emissions from diesel-fueled engine exhaust. The 2007 JFTB Sustainability Analysis correlated DPM directly with PM₁₀ emissions from diesel-fueled engines, which it then used to develop a prioritization factor for screening toxic air contaminants for the purposes of assessing health risks. The 2007 Sustainability Analysis determined that a threshold of 20 pounds/day of DPM (PM₁₀ from diesel-fueled engines) would trigger a health risk impact requirement. Assuming that PM₁₀ equals DPM, which is a very conservative assumption, the additional 780 UH-60 flights would contribute an additional 3.67 pounds of PM₁₀ per day as shown in Table 3-7. Based on this assumption, the increase in PM₁₀ from the Proposed Action falls far below the 20 pound/day threshold established by the 2007 Sustainability Study.

Due to the limited number of additional military support vehicles associated with the Proposed Action, only negligible increases in DPM are anticipated at JFTB. No major aircraft or vehicle maintenance involving the use of solvents or degreasing chemicals are proposed. Limited additional smog and emissions testing on military vehicles at ECS 16 would occur. No major component repair or maintenance activities involving the use of TACs are anticipated (Wilson, 2010, 2011).

General Conformity Determination

The General Conformity Rule exempts tactical military vehicles such as the eight additional UH-60 aircraft proposed for stationing at JFTB. The General Conformity Rule also exempts any Proposed Action involving *de minimis* air emissions from a full conformity determination. *De minimis* emissions are those that fall below the *de minimis* emission thresholds, which are presented in Table 3-9. Based on these exemptions, a General Conformity Determination would not be necessary, however, given the sensitivity of any new air emissions within the SCAB, emissions associated with the additional 780 UH-60 flight operations and associated military support vehicles were analyzed for conformity anyway.

Table 3-9. *De Minimis* Threshold Values (Pounds/Day)

Source	CO	NO _x	SO _x	VOC	PM _{2.5}	PM ₁₀	Pb
<i>De minimis</i> Construction Threshold	550	100	150	75	55	150	3
<i>De minimis</i> Operations Threshold	550	55	150	55	55	150	3
Increase from Flight Operations	13.78	5.20	0.38	0.84	-	3.67	-
Increase from Support Vehicles/Operations	75.90	27.30	-	8.70	-	2.40	-
Total Increase from Proposed Action	89.68	32.5	0.38	9.54	0	6.07	0

Source: CAARNG, 2007a.

NO_x-nitrogen oxides; **VOC**-Volatile Organic Compound; **PM₁₀**-particulate matter, fine; **PM_{2.5}**-particulate matter, very fine; **SO_x**-sulfur oxide; **CO**-carbon monoxide; **Pb**-lead

When increases in emissions from the aircraft operations (Table 3-7) and other operational air emissions (Table 3-8) are combined and compared to *de minimis* threshold values shown on Table 3-9, it is apparent that the emissions resulting from the Proposed Action will not result in emissions greater than established *de minimis* values. In accordance with the General Conformity Rule (40 CFR§§51.850-860 and 40 CFR§§93.150-160), it is therefore concluded that air emissions associated with the Proposed Action are in conformity with the SIP and Air Quality Management Plans for federal non-attainment pollutants and a Record of Non-Applicability has been prepared (Appendix A).

Since the majority of the personnel (estimated at 70 percent of the Reservists) assigned to the Company live in the Los Angeles basin but commute to Victorville, which lies outside the SCAB boundary, individual commute distances and times will be reduced with the relocation to JFTB. This reduction in the total commute distance and associated use of fossil fuel would have minor beneficial impacts to regional air quality. Overall, only very minor direct and indirect impacts to air quality are anticipated as a result of implementing the Proposed Action.

No Action Alternative

Under the No Action Alternative, the USAR would not station the aviation unit at JFTB. There would be no addition of vehicles or equipment that would produce air emissions and therefore would have no impact to local or regional air quality.

Cumulative Impacts

California has established one of the most aggressive air quality resource protection programs in the country. The SCAB is one of the most heavily regulated air basins in the country and is subject to federal, state, and local air quality management programs.

The increases in emissions from additional flight operations and other operations associated with Proposed Action were calculated using the 2007 JFTB Sustainability Model and the results were used as the primary indicator of potential air emission impact significance. All emission increases calculated by the JFTB Sustainability Model fell far below the significance thresholds indicating that the Proposed Action will have a minimal impact on air quality at the local or regional level. JFTB continues to serve as an active regional air operations platform for the DoD and implementation of the Proposed Action, when combined with these existing operations, is not anticipated to create any significant additive impact to air quality conditions within the SCAB.

The Proposed Action will cause minimal increases in air emissions due to changes in aircraft operations and support vehicle operations at JFTB, but a slight reduction in the emissions caused by personnel commuting. However, these net emissions increases combined with current emissions and emissions from future development on and around JFTB are not expected to have a significant impact on local or regional air quality. Finally, the anticipated cumulative impacts associated with the Proposed Action would be less than significant.

3.8 Visual Resources

3.8.1 Affected Environment

JFTB Los Alamitos is located in a highly developed and urban area. The majority of the Installation is developed and contains buildings, structures, and associated development that is consistent with a military airfield. The majority of facilities on the Installation were constructed in the 1940s and 1950s. Most buildings and structures are located in the Cantonment area and are of similar construction, height, and color. Views of the Installation from outside its boundaries are mostly obstructed by fencing or vegetation and much of the area directly visible by the surrounding communities consists of open space, agricultural fields, or recreational areas such as the golf course. A solid wall was constructed along the northern boundary to restrict visibility from outside the Installation.

3.8.2 Environmental Consequences

Alternative One

Under the Proposed Action, no impacts to visual resources are anticipated. The Company would use existing facilities on Installation for activities that are consistent with current activities conducted at ECS 16 and the airfield. Therefore, there would be no significant impact to views from outside or within the Installation boundaries. The Black Hawk helicopter is already in use by the CAARNG at the Installation, so the addition of the USAR helicopters would not create a new impact to the viewshed. Some nighttime helicopter training may occur, which would require the use of airfield lighting during nighttime hours. The helicopters are equipped with lighting that would also be seen from the ground in the night sky. Although the helicopters would fly at lower altitudes than fixed-wing aircraft, it is not anticipated to impact visual resources during the day or night. Additionally, the helicopters will follow existing flight routes that avoid residential areas. The limited number of flights that would result from the Proposed Action is not anticipated to result in any impacts to the existing visual environment.

No Action Alternative

Under the No Action Alternative, the USAR would not station the Company at JFTB Los Alamitos. There would be no impact on visual resources.

Cumulative Impacts

The Proposed Action, combined with known proposed future development on the Installation and in the surrounding area, is not anticipated to have a significant cumulative impact on visual resources. The USAR will use existing facilities consistent with current use and are not relocating any aircraft or equipment that is not already used at the Installation. The limited number of helicopter flights associated with the Proposed Action is not anticipated to result in any significant cumulative impact.

3.9 Noise

3.9.1 Affected Environment

Sound is generated by a complex series of vibrations through a medium such as air. When sound interrupts daily activities such as sleeping or conversation, it becomes noise. The degree to which noise is considered disruptive is dependent on the way it is perceived by the people living or working in the affected area. Human response to noise depends on various factors, including the distance between the noise source and receptor, the sensitivity of the noise receptor, and the time of day.

The loudness or intensity of a sound is determined by pressure change. The greater the change, the louder the sound. Sound intensity is measured in decibels (dB). The loudest sounds that can be detected comfortably by the human ear are a trillion times higher than the threshold of hearing. Because numbers of this magnitude are unwieldy to work with, we use a logarithmic scale for convenience. The threshold of hearing is placed at 0 dB. Normal speech is approximately 60 dB, and the threshold of pain is around 140 dB.

Noise is physically characterized by frequency and intensity. While we hear in a range of 20-20,000 hertz, we hear best in the range of 1,000 to 4,000 hertz. In measuring community noise, our frequency dependence is taken into account by adjusting the very high and very low frequencies to approximate the human ear's sensitivity to those frequencies. This is called "A-weighting" and is commonly used in measuring community environmental noise, especially near airports. Most people are exposed to sound levels of 45 to 85 A-weighted decibels (dBA) or higher on a daily basis (MANG, 2005).

Since 1974, the EPA has endorsed the use of the Equivalent Level (LEQ) to measure noise at airfields. LEQ combines three aspects of noise into one single number predictive of community annoyance. These three aspects are: 1) the number of intrusive sounds each day; 2) the maximum sound levels of each of those intrusive sounds; and 3) the durations of the intrusive sounds.

While we hear single events, we use a cumulative metric, the Day-Night Average Sound Level (DNL), for land use planning near airports in the United States. DNL incorporates those events we perceive most about noise: The loudness of events, the duration of and number of events, and the time of day. Noise energy from the events in a 24-hour period are averaged, with an additional 10 dB penalty added to operations after 10:00 PM and before 7:00 AM to account for the additional annoyance perceived with nighttime operations. The state of California uses a three period 24-hour time LEQ, which includes an additional evening period where a 5dB penalty is added. This measure, known as the Community Noise Exposure Level (CNEL), is California's measure of choice. At facilities such as JFTB Los Alamitos, the CNEL is less than one dB higher than the DNL, which in practice is considered an insignificant difference in predicting community response to noise (CAARNG, 2007a).

The major source of noise at JFTB Los Alamitos is airfield operations, which includes flying a variety of fixed and rotary-winged aircraft. Other noise sources at the Installation include motor

vehicle traffic, maintenance equipment, and natural environmental noises. Common noise sources and their noise levels are provided in Table 3-10. There are three measures or metrics used to describe the noise issues surrounding the Installation: 1) direct measurements of noise levels from Installation operations; 2) computerized noise modeling of Installation operations; and 3) geographic analysis of public response to noise in the form of complaints and/or feedback from public hearings (CAARNG, 2007a).

Table 3-10. Common Noise Sources and Noise Levels

Common Outdoor Source	Noise Level (dBA)	Common Indoor Source
B-747 Jet Takeoff (2 miles)	100	Inside New York Subway Train
Diesel Truck at 150 ft.	90	Food Blender at 3 ft.
Noisy Urban Daytime	80	Garbage Disposal at 3 ft.
B-757 Jet Takeoff at 2 miles	70	Vacuum Cleaner at 10 ft.
Commercial Area	60	Normal Speech at 3 ft.
Light Traffic (100 ft)	50	Dishwasher in Next Room
Bird Calls (distant)	40	Large Conference Room (background)
Soft Whisper (5 ft)	30	Library

dBA- A-weighted decibels; Sources: U.S. Government Accountability Office 2007 and DoD Noise Pamphlet

Noise levels at JFTB Los Alamitos were first documented using direct measurement in a 1982 study conducted by the U.S. Environmental Hygiene Agency (USAEHA) and was used to check the accuracy of the noise contour maps the USAEHA had prepared for the Installation using their NOISEMAP software. The study included five monitoring sites along the Installation perimeter. Study results did not exceed 65dB and noise exposure levels were considered to be compatible with residential land use along the Installation boundary (CAARNG, 2007a).

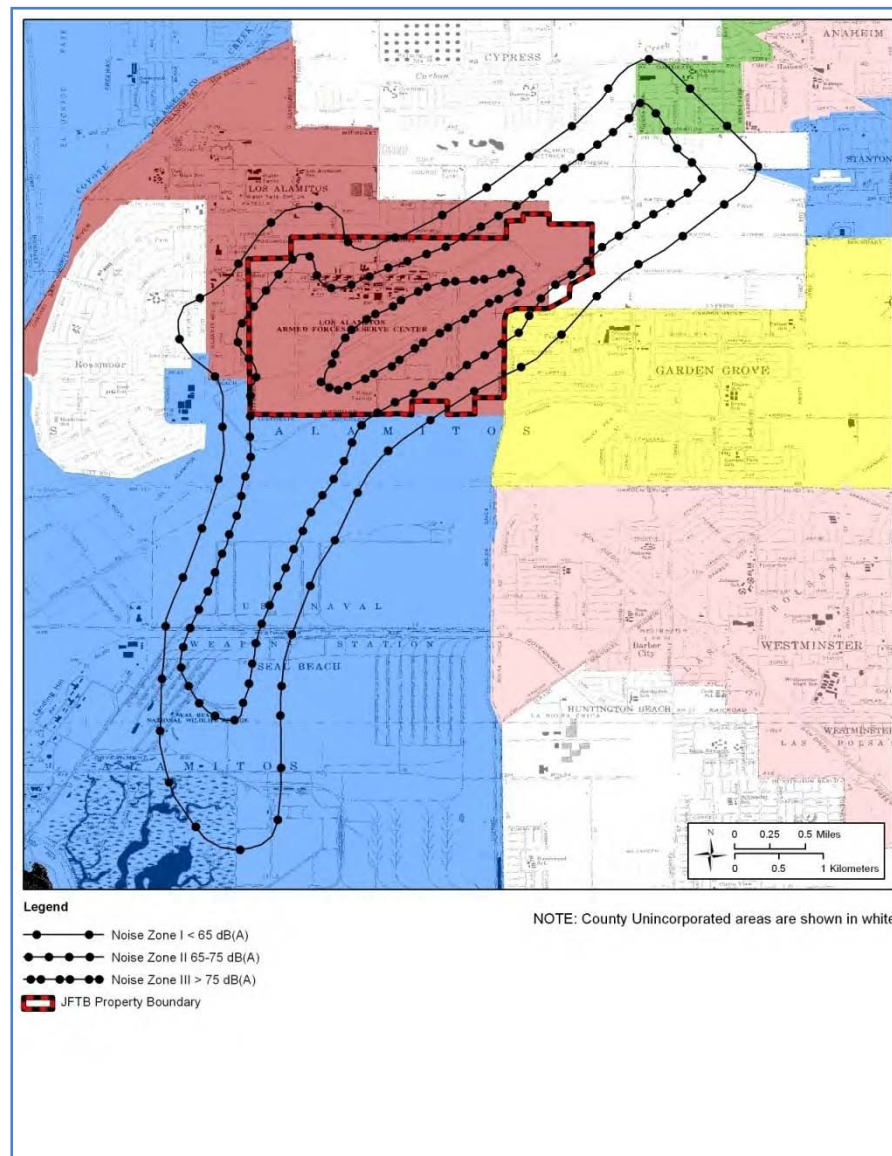
In 1995, in response to a proposal to build new homes in Rossmoor, a second study using direct measurements was conducted jointly by the CAARNG and the U.S. Army Center for Health Promotion and Preventative Medicine. This study concluded that the noise level was considered compatible with residential use under DoD guidelines, but was at the threshold of acceptability under California guidelines (CAARNG, 2007a). In 1997, Wyle Laboratories conducted a third direct measurement study based on noise complaint data collected over a five year period. The study identified four centers of complaints (Figure 3-5). The majority, nearly 80 percent, of complaints involved rotary wing aircraft operations, and most involved single episodic events (CAARNG, 2007a).



Source: CAARNG, 2007a

Figure 3-5. Four Clusters of Households Complaining of Helicopter Noise Over a 5-Year Period

There are several computer-generated noise maps for JFTB Los Alamitos. The two most relevant are the 1987 USAEHA map based on operations from 1986 and the 1998 Wyle Laboratories map based on 1997 operations. The noise contours identified in the 1987 map were confirmed as “official” contours within the 1994 AICUZ study for JFTB Los Alamitos and are shown in Figure 3-6 (CAARNG, 2007a).



Source: CAARNG, 2007a

Figure 3-6. Noise Contours at JFTB Los Alamitos

The CAARNG's 2007 Sustainability Analysis contained detailed qualitative analysis of the noise environment at JFTB Los Alamitos. The JFTB Sustainability Analysis Model (the Model) shows how mission changes at the Installation would affect the noise environment relative to thresholds pertinent to NEPA and CEQA compliance. The Model was developed by the USAF to simulate noise levels for particular types of aircraft at specified distances. The Model attempts to estimate increases in DNL associated with flight operation changes and can derive changes in operations under various scenarios that result in a 1.5 dB increase, relative to baseline conditions. An increase of 1.5 dB is significant because the Federal Interagency Committee on Noise consensus regarding significance thresholds for areas exposed to DNL 60 or higher recommends that an increase of 1.5 DNL or more would require further analysis. (CAARNG, 2007a). Based on an

assessment of aircraft flight operation trends, core mission requirements, and potential future mission considerations, four scenarios were selected to simulate conditions of the Installation within the Model:

- 1.) JFTB Los Alamitos grows proportionately across all aircraft types relative to baseline conditions (Scenario 1);
- 2.) JFTB grows in its core military mission with respect to Black Hawk training, as it has in the past (Scenario 2);
- 3.) JFTB Los Alamitos grows disproportionately in the area of civil aviations it has recently, leaving all military flight operations at baseline levels (Scenario 3); and
- 4.) JFTB grows in supporting missions of other agencies (i.e. Orange County, Port Security, and Immigration and Customs Services) where there will be a greater emphasis on commercial aviation, particularly large aircraft flight operations (Scenario 4) (CAARNG, 2007a).

The results of the Model's analysis are shown in Table 3-11. Changes in noise levels for all scenarios evaluated within the Sustainability Analysis were below 1.5 dB and noise thresholds were not exceeded.

Table 3-11. Change in Aircraft that Will Exceed the Significance Threshold

Scenario	Percent Change in Aircraft Operations that Results in Exceedance of Significance Threshold	Changes in dB Relative to 2006 Baseline (Threshold = 1.5 dB)
Scenario 1: Increase all flight operations	30% (67,000/year)	0.8
Scenario 2: Increase Blackhawk operations	120% (60,000/year)	0.4
Scenario 3: Increase non-military general aviation operations	42% (68,000/year)	0.7
Scenario 4: Increase of commercial aircraft by 3800 annual flight operations (primarily large jet aircraft)	7% (55,000/year)	0.3

Source: CAARNG, 2007a

Noise is a major component of the AICUZ program and influences land use planning, as described in Section 3.2, *Land Use*. The Army defines three noise zones in relation to noise generated from airfield activities, using the DNL for defining noise zones for aircraft activities. These noise zones are described, specific to aviation operations, in Table 3-12.

The 1994 AICUZ study identifies noise zone boundaries at JFTB Los Alamitos by using noise exposure contours representing areas of equal noise exposure. Land designated for airfield operations at JFTB Los Alamitos is located within Zone III. All areas designated as Zone III are within Installation boundaries. The majority of Zone II area is located within the Installation's boundaries. Portions of Zone II extend beyond the Installation's boundaries, mostly to the northeast and southwest of the Installation (CAARNG, 1994). Sensitive receptors are areas more

susceptible to be negatively impacted by noise, and include schools, hospitals, daycares, and residential areas. Ideally, sensitive receptors are located within Zone I.

Table 3-12. Noise Zones

Noise Zone	General Level of Noise	Aviation DNL (dBA)	Recommended Uses
ZONE I	Low	<65	Generally acceptable with any residential or noise sensitive uses
ZONE II	Moderate	65-75	Normally not recommended for residential or noise-sensitive uses
ZONE III	High	>75	Not recommended with all residential or noise-sensitive uses

dBA- A-weighted decibels; Source: DoD 2005

JFTB Los Alamitos is located in extreme proximity to several highly concentrated residential areas, and as a result has developed a Noise Abatement Program which incorporates unique traffic patterns and arrival/departure procedures. The program focuses on pilot education and cooperation which also benefits the immediate surrounding residential communities of Los Alamitos, Seal Beach, Garden Grove, and Cypress, by reducing the adverse impact of noise during aviation operations. Helicopter aircrews participating in aviation operations at LAAAF are expected to know and adhere to the noise abatement flight procedures. Compliance with flight procedures is mandatory unless deviations are made necessary by weather, ATC instructions, an in-flight emergency, or other safety considerations. Repeat violators of noise abatement flight procedures may be restricted or suspended from using the airfield. The JFTB's goal is to maintain positive relationships with surrounding communities, so it is imperative participating helicopter aircrews personally attempt to reduce the adverse impact of helicopter noise (CAARNG, undated). Following the procedures outlined in this Helicopter Procedures Guide accomplishes this goal. A copy of the Guide can be found at Appendix D.

In an effort to keep the local communities informed about ongoing and upcoming operations at the JFTB, the Installation publishes notifications in the Orange County Register during periods of increased operations, such as the weeks leading up to a unit's combat deployment (Herzog, 2011).

The Public Affairs Office maintains a log of noise complaints received from the community. In addition, the Installation has an established noise complaint hotline in place since noise control is one of the Installation's priorities (Wilson, 2010 and LAAAF, undated). The noise hotline for JFTB is (562) 795-2573. When a complaint is made, the caller is placed on hold while Air Traffic Control is contacted to identify the source of the noise, which is then relayed back to the caller. Often, the helicopter noise complaints received by Installation are related to non-military aviation activities in the area, such as law enforcement activities (i.e., police chases on the highway or hovering over residential areas during search for suspects, etc.) (Wilson, 2010).

3.9.2 *Environmental Consequences*

Alternative One

Implementation of the Proposed Action is not anticipated to result in significant impacts to the existing noise environment at JFTB Los Alamitos or surrounding areas. The USAR would not be introducing a new source of noise to the environment, because the Black Hawk helicopter is already in use by the CAARNG at the Installation. There are currently 20 CAARNG Black Hawk helicopters stationed at the Installation, in addition to a variety of other rotary-winged aircraft (B-206, A-STAR) and fixed-wing aircraft (C-12 and Beech-90) that are stationed or routinely use the Installation.

Unlike fixed-wing aircraft that are louder when taking off, helicopters make more noise when they are landing. This is mostly attributed to rotational noise commonly referred to as “blade-slap.” This is the low frequency throbbing sound heard when helicopters are landing (DoD, 2005). Helicopters generate both engine noise and propeller noise. Over the years, advancements in helicopter technology have greatly reduced the amount of noise they produce. Modifications such as using four instead of two blades significantly decreased the amount of noise generated by “blade-slap”. Reductions in noise generation not only lessens the impact to the outside environment, but also protects the flight crew from hearing loss, provides better communication, and avoids acoustic detection by enemies (DoD, 2005).

The FAA requires aircraft to fly more than 1,000 ft above populated areas and more than 500 ft above unpopulated areas, unless the FAA has approved a lower level flight waiver. In addition to adhering to FAA flight regulations, the flight routes established by JFTB Los Alamitos avoid flights over residential communities at all times and would restrict hovering over populated areas. USAR helicopters would follow existing flight routes, unless weather related events or emergencies require modifications. Additionally, USAR flight operations would comply with Installation policy and applicable regulations, including the Installation’s Helicopter Procedures Guide, the JFTB Los Alamitos AICUZ study, JFTB Regulation 95-1 *Operations Manual for Los Alamitos Army Airfield*, and the CAARNG’s Statewide Operational Noise Management Plan.

The USAR’s addition of eight Black Hawks would result in an average of 13 additional flights per week (676 additional flights per year) (Wilson, 2010, 2011). Based on the data from the JFTB Sustainability Model (Scenario 2: Increase in Black Hawk operations), an increase in operations of 120 percent (60,000/year) would only produce a 0.4 dB change relative to 2006 baseline data, which would not exceed the threshold of 1.5 dB (CAARNG, 2007a). Therefore, the USAR’s operations would not be expected to exceed noise thresholds or produce any significant impacts to the noise environment.

Other operational noise generated by the Company, such as administrative and maintenance activities, would be negligible and is not expected to result in any adverse impacts to the noise environment. Personnel would wear appropriate hearing protection in accordance with applicable health and safety regulations to prevent hearing loss and damage. Based on this information, adverse impacts to the noise environment are anticipated to be less than significant.

No Action Alternative

Under the No Action Alternative, the USAR would not relocate the Company to JFTB Los Alamitos. The No Action Alternative would not result in any noise impacts.

Cumulative Impacts

When combined with anticipated future airfield noise and existing noise generated on the Installation and in surrounding communities, the Proposed Action is not expected to produce any significant impacts to the noise environment. Therefore, cumulative noise impacts are anticipated to be less than significant.

3.10 Socioeconomics

3.10.1 Affected Environment

The term socioeconomics typically describes the basic attributes and resources associated with the human environment, with particular emphasis on population, housing, employment, and personal income. Indicators of these conditions for the greater project area are discussed in this section.

For this project, the region of influence (ROI) for socioeconomics is considered to be the City of Los Alamitos and Orange County. The 2009 estimated total population of Orange County is 3,139,017, a gain of 10 percent from the actual 2000 Census figure of 2,846,297. The population of Los Alamitos was 11,536 in 2000 and grew to an estimated 12,201 in 2009, for an increase of 6 percent (Census 2010). There is an average of 3.10 persons per housing unit in Orange County, higher than the average of 2.72 in Los Alamitos (U.S. Census 2010).

The economy of Orange County, a primarily suburban county in the Los Angeles area, is based on the educational, health and social services, service, retail, and agricultural sectors of the economy. According to the California Employment Development Department (CDR 2010), in May 2009 the Orange County civilian labor force totaled 1,635,900 people, of which 135,900 were unemployed for a jobless rate of 8.3 percent.

Educational, health and social services is the top employing sector in Los Alamitos, accounting for 19.9 percent of all jobs. In Orange County, manufacturing is the leading employer with 17 percent of the jobs.

The median household income in Orange County for 2009 was estimated at \$81,302. Figures were not available for Los Alamitos. At the time of the 2000 Census, Orange County had a median household income of \$64,611, slightly higher than Los Alamitos' \$55,286 (U.S. Census 2010).

There is considerable demographic variability within the ROI. The total population from the 2000 Census in Orange County is 2,846,297 persons. Of that number, 97.8 percent are of one race rather than a mix, for example, of Whites and Latinos or Whites and African-Americans. There are more Whites in Orange County compared to any other race or ethnic group, totaling an estimated

2,360,859 in 2009 (U.S. Census 2010). Hispanics or Latinos make up the second largest demographic, with an estimated 1,033,788 persons out of the estimated Orange County total of 3,139,017 in 2009 (U.S. Census 2010).

Meanwhile, Asians, comprised of Chinese, Japanese, Filipino, Korean, and Vietnamese, among others, and who are the third largest demographic, comprise about 18 percent of the total Orange County population with 542,446 persons. African-Americans make up just 2.0 percent of the population with 60,536 persons, while American Indians make up 0.9 percent of the total County population with 26,319 persons (U.S. Census 2000). See Table 3-12 for more detailed information.

Whites also make up the majority of the population in Los Alamitos. The White population in Los Alamitos in 2000 was 8,879, or 77 percent of the local population. Hispanic and Latino people total 1,848 persons and comprised 16 percent of the local population. Asians are the third largest demographic with 1,095 persons (9 percent), followed by African-Americans (369 persons, or 3 percent) (U.S. Census 2000).

Orange County had a total of 969,484 housing units as of the 2000 Census, of which 935,287 (96 percent) were occupied. Los Alamitos had a total of 4,329 housing units in 2000, with 4,246 of those (98 percent) occupied.

Table 3-13. Census Actual and Estimated Data for Los Alamitos and Orange County

	Orange County 2000	Latest Orange County Estimates	Percent Change	Los Alamitos 2000	Latest Los Alamitos Estimates	Percent Change
Population	2,846,297 ¹	3,026,786 ¹	+10%	11,536 ¹	12,201 ¹	+6%
Median Household Income	\$64,611 ²	\$81,302 ^{2,3}	+26%	\$55,286 ¹	NA	NA
One Race	2,729,138 ¹	2,959,445 ¹	+8%	11,067 ¹	NA	NA
Two or More Races	117,151 ¹	67,341 ¹	-42%	469 ¹	NA	NA
White	1,844,652 ¹	2,360,859 ¹	+28%	8,879 ¹	NA	NA
African American	47,649 ¹	59,570 ¹	+25%	369 ¹	NA	NA
Latino or Hispanic	875,579 ¹	1,033,788 ¹	+18%	1,848 ¹	NA	NA
Asian	386,785 ¹	542,398 ¹	+40%	1,095 ¹	NA	NA
American Indian or Alaska Native	19,906 ¹	26,319 ¹	+32%	67 ¹	NA	NA
Hawaiian/Pacific Islander	8,938 ¹	11,340 ¹	+27%	38 ¹	3.10.2 NA	3.10.3 NA

	Orange County 2000	Latest Orange County Estimates	Percent Change	Los Alamitos 2000	Latest Los Alamitos Estimates	Percent Change
3.10.4 Lab or Force	3.10.5 1,553,9 36 ¹	3.10.6 1,635,9 00 ²	3.10.7 + 5 %	3.10.8 5,8 88 ¹	3.10.9 NA	3.10.10 N A
3.10.11 Unem ploye d	3.10.12 NA	3.10.13 135,9 0 0 ²	3.10.14 NA	3.10.15 NA	3.10.16 NA	3.10.17 N A
3.10.18 Unem ploy ment Rate	3.10.19 NA	3.10.20 8.3% ²	3.10.21 NA	3.10.22 NA	3.10.23 2.0 % ⁴	3.10.24 N A
3.10.25 T otal Housing Units	3.10.26 969,4 8 4 ¹	3.10.27 1,029,3 10 ¹	3.10.28 + 6 %	3.10.29 4,3 29 ¹	3.10.30 NA	3.10.31 N A
3.10.32 Occupie d Housing Units	3.10.33 935,2 8 7 ¹	3.10.34 973,2 4 7 ¹	3.10.35 + 4 %	3.10.36 4,2 46 ¹	3.10.37 NA	3.10.38 N A
3.10.39 Vacant Housing Units	3.10.40 34,19 7 ¹	3.10.41 56,06 3 ¹	3.10.42 + 6 6%	3.10.43 39 ¹	3.10.44 NA	3.10.45 N A

¹Source: U.S. Census Bureau; ²CDR 2009; ³2007 estimate; ⁴Los Alamitos 2009 (for year 2007)

NA-Not Available

Environmental Justice

EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, ensures fair treatment and meaningful involvement of all people regardless of race, color, national origin or income, with respect to the development, implementation and enforcement of environmental laws, regulations and policies. The general population is typically defined as being that of relevant larger governmental jurisdictions, such as an adjacent larger municipality or the county as a whole. In this instance, population proportions within the City of Los Alamitos are compared to those within Orange County.

Total minority population, for the purposes of this analysis, represents all individuals in the population except White, non-Hispanic persons (because persons of any race other than White are considered minority, and any persons of Hispanic ethnicity of any race, including White, are considered minority).

Low-income populations are typically described in terms of median household income or in terms of the persons living below poverty level. Approximately 7.5 percent of all families living in Orange County fall below the poverty level. The situation is slightly better for families headed by married couples, as only 4.7 percent of those are officially “in poverty.” Female-led families with no husband present are worst off, as 18.6 percent of those fall below the poverty line (American Community Survey 2009).

The majority of Orange County families, or 51 percent, fall within the \$50,000 to \$149,999 yearly earning level. The highest percentage of those families (19.4 percent) falls within the \$100,000 to \$149,999 range. A total of 18.4 percent of all Orange County families earn below \$34,999 per

year (American Community Survey 2009). The 2000 U.S. Census shows that 124 Los Alamitos families and 567 individuals were below the poverty level at that time.

3.10.46 Environmental Consequences

Alternative One

Implementation of Alternative One would not result in any significant socioeconomic impacts. Stationing the Company at JFTB Los Alamitos would not result in a significant number of full-time personnel and would have no significant impact on population, demographics, employment, housing, or demand on community services. However, minor beneficial impacts to the local economy would result from the addition of the 29 FT personnel and during weekend and annual training activities, when Reservists would travel to the JFTB and likely contribute to local sales volumes.

The USAR conducted a study to assess the potential socioeconomic impacts of the construction and operation of USAR Centers. The study included 21 proposed USAR Centers spanning a cross-section of communities and a variety of facility sizes ranging from 73 to 734 Reservists at costs of \$7.5 million to \$26.4 million. The Economic Impact Forecast System (EIFS), which employs the Rational Threshold Value (RTV) technique, was used to conduct the analysis. The study found all of the proposed projects were well below the RTV thresholds for significance and calculated the size of projects necessary to cross the thresholds. These calculations indicated projects under \$200 million and 5,000 Reservists would not require individual EIFS analysis. As a conservative measure, the USAR has established \$100 million and 1,000 Reservists as thresholds for any further socioeconomic analyses (Webster 2009). While Alternative One does not include construction of additional facilities, the findings of the study clearly demonstrate that the 29 FT and 58 Reservists transferring to JFTB Los Alamitos would be significantly lower than the established thresholds for socioeconomic impact. As a result, no individual socioeconomic analyses are required for this project.

There would be no disproportionate adverse environmental or health effects on low income or minority populations as a result of Alternative One. No environmental justice impacts are anticipated.

No Action Alternative

Under the No Action Alternative, the USAR would not station the Company at JFTB Los Alamitos. The No Action Alternative would result in the Company staying in the existing leased facility in Victorville, which would continue to cost the taxpayers a substantial amount of money each year. The No Action Alternative would not result in any environmental justice impacts.

Cumulative Impacts

Implementation of the Proposed Action is not anticipated to result in any significant cumulative impacts. Since the Proposed Action would have negligible direct impacts on population,

demographics, employment, housing, and the demand on community services, no adverse cumulative socioeconomic impacts are anticipated.

3.11 Transportation and Circulation

3.11.1 Affected Environment

The City of Los Alamitos encompasses approximately 4.10 square miles and is bounded by Cerrito Avenue to the north, I-605 to the west, Lampson Avenue to the south and Walker Street on the east. Cypress Business Park, which provides employment opportunities as well as generating increased traffic, sits on the eastern border of Los Alamitos in the Katella Avenue corridor. Katella Avenue, Cerritos Avenue and Ball Road provide the main routes for traffic in an east/west direction, while Los Alamitos Boulevard carries the brunt of traffic flowing north and south. (Los Alamitos 1998).

The City of Los Alamitos has adopted the Orange County Master Plan of Arterial Highways (MPAH) for all circulation roadways within the city. The MPAH makes the following distinctions regarding roadway classifications (Los Alamitos 1998):

- A Smart Street is a designated six to eight lane divided roadway with a maximum right-of-way of 122 feet. It is estimated to have a design capacity of 72,000 vehicles per day in the eight lane configuration. Katella Avenue is a smart street.
- A Major Arterial is a six lane divided roadway with a typical right-of-way of 120 feet. A major arterial is designed to accommodate a maximum of 54,000 daily vehicle trips. Los Alamitos Boulevard and Valley View are examples of major arterials.
- A Primary Arterial is a four lane, physically divided road way, typically with a right-of-way of 100 feet. It is designed to accommodate up to 36,000 vehicles per day. Ball Road and Cerritos Avenues are examples of primary arterials.
- A Secondary Arterial is a four lane undivided road with a right-of-way of 80 feet. It is designed to handle 24,000 daily vehicle trips. The main gate to the JFTB is accessed from Lexington Avenue, which is designated as a secondary arterial.

Katella Avenue intersects with Lexington Drive, providing access to the main gate at the JFTB (Figure 3-7). Lexington Drive consists of two 25-foot roadways separated by a 17-foot wide median and provides access to the JFTB main gate at its intersection with Farquhar Avenue. From the main gate, the road continues south to the junction of Minuteman Circle and Saratoga Avenue. Approximately 1,932 vehicles enter the JFTB daily. For drivers needing access to the dog park, athletic fields or agricultural areas on the south side of the airfield, a second gate is accessible from Lampson Avenue. There is a third gate at the corner of Saratoga and Orangewood avenues, but it remains locked due to conflicts with local residences, a school, and a church. It can be opened for special events or emergencies (CAARNG & USAR 2010).

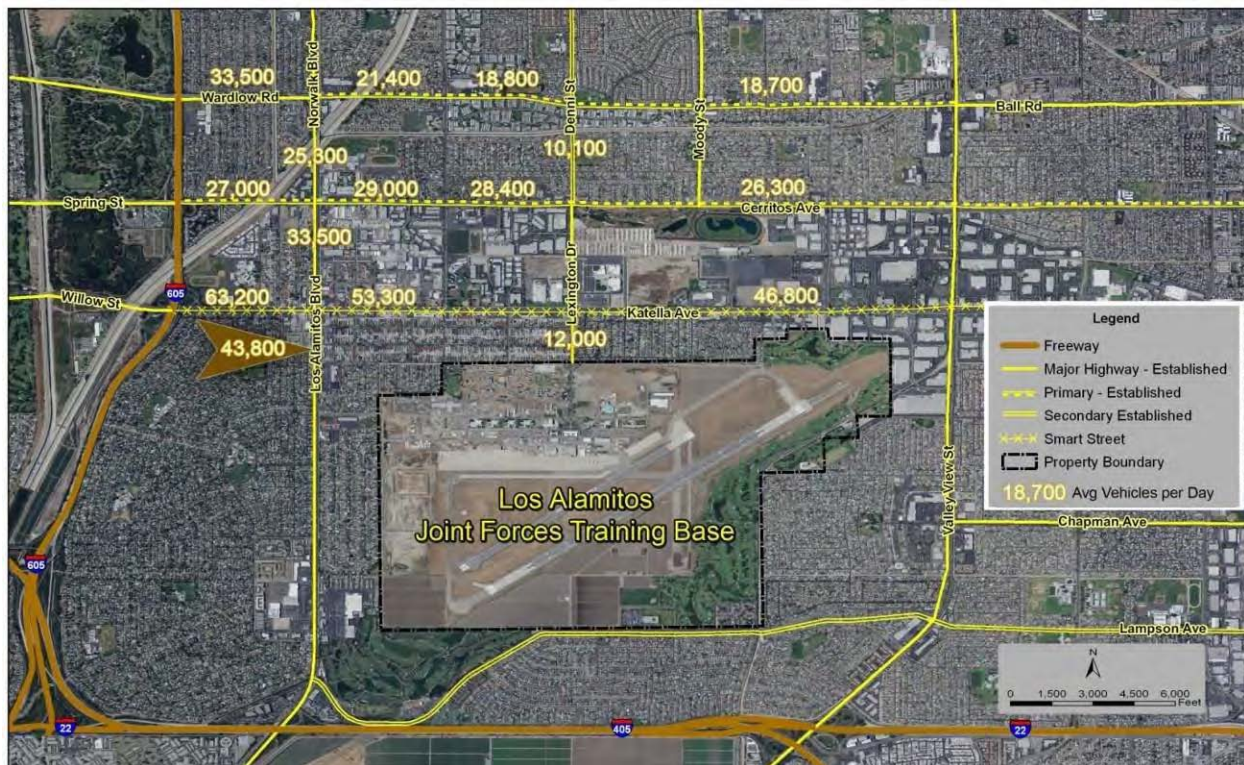
Saratoga, Yorktown, and Constitution avenues provide the main east-west access through the JFTB. There is no direct north-south access through the base, forcing drivers to use either the

intersection of Lexington Drive/Saratoga Avenue/Minutemen Circle, or weave through the complex on short streets (CAARNG & USAR 2010).

Truck traffic on Base is confined to a single route from the main gate, south along Lexington Drive, west along Liberty Avenue, and south on Gettysburg Street (CAARNG & USAR 2010).

There are spaces for parking approximately 1,600 vehicles on the JFTB. Government Owned Vehicle parking areas are west of Freedom Way, north of Saratoga Avenue. POV parking areas are situated in two separate areas between Constitution Avenue and Yorktown Avenue. The access to Hangar 3 (Building 912) is located at 4102 Constitution Avenue. A parking lot for the facility is located across Constitution Avenue. Street parking is available on Constitution Avenue (CAARNG & USAR 2010).

The Orange County Transit Authority operates bus service in the region with a stop at Katella Avenue and Los Alamitos Boulevard, approximately 2/3 of a mile from the JFTB.



Source: Los Alamitos 2010 General Plan, 1998

Figure 3-7. Main Traffic Arterials and Vehicle Counts in JFTB ROI

3.11.2 Environmental Consequences

Alternative One

Under Alternative One, no significant adverse impacts to transportation are anticipated. The Proposed Action would not require the creation of new roads or extension of existing roads and

personnel would access the Base using existing roads and the existing security checkpoint. The addition of 29 FT personnel is not expected to result in any significant adverse impacts to transportation or circulation in the area surrounding the Base. The FT personnel would access the Base during normal weekday business hours. There would be a maximum of 58 Reservists traveling to the JFTB; however, these individuals would be traveling to the Base one weekend a month during non-peak hours, primarily on Saturday and Sunday mornings, and Friday and Sunday evenings.

Since the majority of the personnel assigned to the Company live in the Los Angeles basin but commute to Victorville, overall individual commute distances and times would be reduced. This minor reduction would not have any noticeable impact on regional transportation and circulation.

No Action Alternative

Under the No Action Alternative, the USAR would not station the Company at JFTB Los Alamitos. Members of the Company would continue to commute to Victorville to report for duty. The No Action Alternative would not result in any impacts to traffic or circulation.

Cumulative Impacts

Activities associated with the Proposed Action are not anticipated to contribute to any cumulative impacts to regional transportation. The capacity of existing routes leading to the proposed sites is adequate to accommodate both the existing adjacent property uses and anticipated future growth in the surrounding communities and within the JFTB as part of the RPDP implementation, as well as the minor increases associated with the Proposed Action.

3.12 Utilities

3.12.1 Affected Environment

Potable water at JFTB Los Alamitos is supplied by the Southern California Water Company. The distribution system includes a recently upgraded main line that enters the Installation from Winner's Circle Court. There are two wastewater systems on the Installation: a sanitary sewer system that services the majority of the Installation; and an industrial wastewater system that services areas that produce industrial wastewater, such as washrack facilities and vehicle fueling and maintenance areas. The washracks are equipped with oil/water separators (OWS), which removes industrial waste from the water before discharging the water into the sanitary sewer. The OWSs are regularly emptied by outside contractors hired to dispose of the waste off-site. Wastewater discharged to the sanitary sewer is treated off-site at the County's sanitation plant. Southern California Edison Company provides electrical service to the Installation. Telephone service is provided by Verizon Communications and Natural Gas is provided by The Southern California Gas Company. Solid waste is collected and transported off-site by Briggemen Disposal. There are no landfills located in the City of Los Alamitos; solid waste is disposed of at landfills in surrounding counties.

3.12.2 Environmental Consequences

Alternative One

The implementation of the Proposed Action is not expected to result in any significant impacts to utilities at JFTB Los Alamitos. The addition of the USAR personnel and increase in activities associated with the Company's mission requirements would result in a small increase in the demand for potable water, electricity, natural gas, and communications networks. Additionally, this would have a small increase in the amount of wastewater on the Installation. However, these small increases would not adversely impact the existing utilities infrastructure. All utilities at the Installation have available capacity to support the Proposed Action.

No Action Alternative

Under the No Action Alternative, the USAR would not station the Company at JFTB Los Alamitos. No impacts are expected as a result of the No Action Alternative.

Cumulative Impacts

The small increase in the demand for utilities at the Installation as a result of the Proposed Action is not expected to produce any direct or indirect adverse cumulative impacts, even when combined with past, present, and future projects on and off the Installation.

3.13 Hazardous and Toxic Substances

3.13.1 Affected Environment

Hazardous materials are used, stored, and handled throughout JFTB Los Alamitos. As a result, hazardous waste is generated and temporarily stored at the Installation. The Installation operates under the CAARNG's Hazardous Material and Waste Management Plan (HMWMP) and maintains a Hazardous Materials Business Plan (HMBP) that describes the locations for storage of materials and waste throughout the Installation. The HMBP is updated annually and includes an emergency response/contingency plan for handling fire, explosion, or release of hazardous materials (CAARNG, 2007a). Additionally, the Installation maintains a Spill Prevention, Control, and Countermeasure (SPCC) Plan and Storm Water Pollution Prevention Plan (SWPPP). The Installation operates as a registered large quantity generator, under EPA identification number CA8572890517.

Main areas on the Installation where hazardous materials are used and stored and hazardous materials are generated include fueling operations areas, the flightline area, aircraft hangars, the Engineering Maintenance Facility, and ECS 16. Fueling operations areas include a 200,000 gallon above-ground storage tank (AST) system to dispense aircraft fuel (JP-8) throughout the Installation. Fuel is transported by mobile refuelers, which are stored at two locations on the Installation, and is dispensed to aircraft along the flightline. The mobile refuelers are also used to fill the two underground storage tanks (USTs) located at ECS 16. A section of the flightline area east of Building 72 is used to store fuel pods and bladders containing fuels and oils. Aircraft

hangars, including Building 912, contain storage areas for materials and waste associated with aircraft maintenance activities, such as solvents, paint, engine fluids, and petroleum, oils, and lubricants (POL).

The Engineering Maintenance Facility (Building 35) includes storage yards, warehousing, metal fabricating, painting facilities, plumbing and electrical shops, a washrack, and an industrial wastewater clarifier. Materials handled and stored there include solvents, fuels, paints, POLs, batteries, along with hazardous waste generated. ECS 16 is the primary maintenance and equipment concentration site for the USAR and is used for vehicle and equipment maintenance and storage. ECS 16 is not used for helicopter maintenance. It includes four 550-gallon waste oil ASTs; a fuel island with a 6,000-gallon gasoline Underground Storage Tank (UST) and 10,000-gallon diesel fuel UST; three drum storage sheds; washrack; and battery storage structure. Typical materials stored at ECS 16 include solvents, paints, POLs, batteries, engine fluids, and hazardous waste generated including waste oil, filters, chemicals, and solvents.

Other areas on the Installation are also used for hazardous materials storage, such as Buildings 6457A and 6457B, which are self-contained storage sheds used to store pesticides and herbicides. Hazardous materials in other buildings, such as cleaning or maintenance-related products are stored in designated areas. Clarifiers and OWSs are located throughout the Installation in association with washracks and areas where maintenance activities occur. Additionally, there is one small arms ammunitions bunker located on the Installation.

As a registered large quantity generator, the Installation can store hazardous waste for up to ninety days at its Central Accumulations Site east of the Medfly Compound in Building 287. There are five satellite accumulations points (SAPs) on the Installation that may store hazardous waste for up to 180 days or up to 55 gallons per waste stream (CAARNG, 2007a). The five SAPs include ECS 16, Organizational Maintenance Shop 8, Public Works Center, Aviation Support Facilities, and the JFTB SAP. According to a search of the EPA's Enforcement and Compliance History Online database, JFTB Los Alamitos has received no compliance violations associated with its large quantity generator permit in the past five years (USEPA, 2011). The USAR maintains a separate EPA identification number for waste generated at ECS 16 and Building 912. The existing USAR aviation activities generate approximately 4 gallons of waste oil per month (Wilson, 2011).

The Installation Restoration Program (IRP) is a DoD program for military facilities worldwide. The purpose of the program is to investigate and remediate sites that pose threats to human health and the environment. There are 11 active IRP sites located at JFTB Los Alamitos including a fire/crash training area, former landfill, washrack, former small arms range, storage area, UST farm, and contaminated groundwater area (CAARNG, 2010). Neither ECS 16 nor Building 912 is located within these IRP sites. ECS 16 was previously listed as an IRP site, however all remediation activities have been complete and the site is listed as a closed IRP site requiring no further action (CAARNG, 2009). JFTB Los Alamitos' current Installation Action Plan projects response actions for all confirmed contaminated sites to be completed by 2013 and those long-term monitoring activities such as groundwater monitoring, tree maintenance, and landfill cover will continue indefinitely (CAARNG, 2007a).

Radon surveys have not been conducted at ECS 16 or Building 912. However, JFTB Los Alamitos is located in EPA Radon Zone 3, where the indoor average level of radon is less than 2.0 picoCuries per liter of air, which is representative of regions with the lowest potential for radon exposure. No ammunition or explosives are stored at ECS 16 or Building 912.

3.13.2 Environmental Consequences

Long-term minor adverse impacts related to hazardous materials and waste would be expected as a result of the Proposed Action. There would be an increased use of hazardous materials and waste generation from maintenance activities conducted by the Company. Hazardous materials typically associated with this type of helicopter unit include solvents, paints, and POLs. All hazardous materials and waste would be handled in accordance with local, state, and federal regulations and in accordance with the Installation's procedures established in the HMWMP, HMBP, SWPPP, and SPCC Plan. The Proposed Action only includes the use of existing facilities at JFTB Los Alamitos. ECS 16 would be used for maintenance of the Company's equipment and vehicles, except helicopters. Light helicopter maintenance, such as fluid checks and replacements would occur at Building 912. However, major maintenance of helicopters would not take place at JFTB Los Alamitos. All maintenance activities would be consistent with current uses at the facilities. The Company generates approximately one gallon of waste oil per month at ASF Victorville, which would account for an approximate 25 percent increase over the 4 gallons currently generated by the USAR at JFTB Los Alamitos. No permanent construction that would result in ground disturbing activities would occur; therefore, no impacts to existing IRP sites or storm water drainage would occur.

The Company's fuel tankers stored at the Installation would be maintained in accordance with all applicable regulations and the Installation's established policies and plans. Personnel from the Company that would operate or perform maintenance on the fuel tankers and helicopters or perform fueling activities would receive training on the Installation's plans and procedures, and would follow the Installation's HMBP and SPCC Plan in the event of an emergency or spill. All helicopter washing would be conducted within the existing washrack facilities. Wastewater from the washrack is filtered through an OWS prior to discharge to the Installation's industrial wastewater system.

No Action Alternative

Under the No Action Alternative, the USAR would not relocate the Company at JFTB Los Alamitos. Therefore, the No Action Alternative would have no impacts related to hazardous and toxic substances.

Cumulative Impacts

The hazardous and toxic substances associated with USAR helicopter maintenance would not differ substantially from the types of substances already in use on the Installation. The amount of these materials when compared to the quantities already in use would be insignificant. The combined amount of hazardous and toxic substances would not likely result in any significant

adverse cumulative impacts given the management procedures in place. In the event of a release of any hazardous or toxic substance, the procedures set forth in the Installation's HMBP, SPCC Plan and SWPPP would be followed and all appropriate efforts to contain and remediate releases would be made.

3.14 Human Health and Safety

3.14.1 Affected Environment

Health and safety services, including police, fire and rescue protection, can be obtained on JFTB Los Alamitos and/or within surrounding communities throughout the City of Los Alamitos, Orange County and the State of California.

The JFTB Los Alamitos Fire Department provides fire prevention and protection services, including inspections and tests of fire protection equipment and systems at the Installation. The Installation has a cooperative agreement with the Orange County Fire Authority to provide emergency assistance. There are no health or medical services or facilities on the Installation. The Los Alamitos Medical Center provides medical and emergency care services. Additional medical and emergency services are available within Orange County.

JFTB Los Alamitos military police provide security and law enforcement services to the Installation. The Cities of Los Alamitos, Seal Beach, Cypress, and Garden Grove Police Departments, along with the Orange County Sheriff's Department provide law enforcement services to the surrounding communities.

The JFTB Los Alamitos AICUZ study establishes accident potential zones (APZs) and clear zones (CZs) to help ensure safety within the Installation and the surrounding areas. The DoD defines three zones extending beyond the end of the Installation's runway: the CZ is the area with the highest probability of an accident and is incompatible with most land uses; APZ I has a decreased potential for accidents, but is still incompatible with residential land use; and APZ II has the least potential for accidents and is compatible for residential land use only at low densities. In 1993, the Deputy Assistant Secretary of the Army granted the CAARNG permission to use the U.S. Air Force AICUZ standards, rather than the Army's standards, because fewer than 10 jet or 25 propeller-driven aircraft operations occur on average per day, per runway. As a result, the CZs were shortened from 3,000 ft to 1,000 ft, which in turn resulted in APZ I and II being completely within the Installation's boundaries. Additionally, the DoD AICUZ program notes that safety zones for helicopters are relatively small in comparison to fixed-wing safety zones, which are dependent on the size of the aircraft (CAARNG, 2007a). Development within the CZs is not permitted. The established flight paths generally follow highways and do not overfly any residential areas, parks, or school zones; see Section 3.2, *Land Use* for additional information.

Bird/animal Aircraft Strike Hazards (BASH) exist at aviation facilities due to the presence of resident and migratory bird species. Daily and seasonal bird movements create an inherent hazard to aviation. In an effort to provide the safest flying conditions possible, the DoD continually implements and improves aviation safety programs. One of these programs is the BASH

Prevention Program, which is a collaborate effort between personnel from air operations, aviation safety, and natural resources (DoDPIF, 2010). BASH Programs develop a plan of action to reduce the potential for collisions between aircraft and birds or other animals. The program typically focuses on managing an airfield's attractiveness as habitat for wildlife; managing wildlife populations, thereby minimizing the potential for wildlife/aircraft strikes; and improving the reporting and communicating of wildlife activity and wildlife/aircraft strikes between interested parties (DoDPIF, 2011). Damaging strikes include holes in the body of aircraft, broken engine fan blades, cracks to the canopy, and other damage to aircraft components. Damaging strikes have the potential to result in loss of life to aircrew, cost millions of dollars per year in repairs to aircraft, and impact training opportunities. Non-damaging strikes usually involve blood smears or feather fragments stuck to the aircraft without penetrating the body of the aircraft. JFTB Los Alamitos plans to develop a BASH plan in the future, as funding allows. There are few instances of bird strike at JFTB Los Alamitos; however, in the event that a bird strike occurs, aircraft operators notify the appropriate safety officers and environmental staff at the Installation. The Installation's environmental personnel identify the species and document the incident (Wilson, 2010, 2011).

EO 13045, *Protection of Children from Environmental Health and Safety Risks*, requires federal agencies, to the extent permitted by law and mission, to identify and assess environmental health and safety risks that might disproportionately affect children. There are no residences, schools, or parks within the designated flight paths or immediately surrounding the facilities where the Company would be located. The Installation boundaries are secured by fencing and/or walls to prevent unauthorized entry to the Installation.

3.14.2 Environmental Consequences

Alternative One

No significant long term or short term adverse impacts to human health and safety would be expected as a result of the Proposed Action. The additional personnel and equipment associated with the Proposed Action would not create a significant increased demand on Installation or community fire, rescue, or law enforcement services, or medical facilities. Helicopter flights would use established and approved flight paths and would be coordinated with the Control Tower. The established APZs and CZs are confined within the Installation boundaries where land use is restricted, which reduces the safety risk to the community and Installation personnel. Implementation of the Proposed Action is not expected to result in any adverse impacts to children.

As described in Section 3.10, Hazardous and Toxic Substances, all hazardous materials and waste would be handled in accordance with local, state, and federal regulations and in accordance with the Installation's procedures established in the HWMP, SWPPP, and SPCC Plan. Additionally, personnel from the Company that would operate or perform maintenance on helicopters and equipment or perform fueling activities would receive training on the Installation's plans and procedures. With these management tools in place, no adverse impacts to human health and safety are anticipated as a result of the Company's use of hazardous or toxic substances.

No Action Alternative

Under the No Action Alternative, the USAR would not station the Company at JFTB Los Alamitos. The No Action Alternative would have no adverse impacts on human health and safety.

Cumulative Impacts

The flights and training associated with the Company would not substantially increase the total number of flights conducted at JFTB Los Alamitos. The increase in the number of flights would not be expected to result in any significant risks to human health and safety. Additionally, the slight increase in the overall amount of hazardous and toxic substances when combined with the Installation's existing amounts would not likely result in any significant adverse cumulative impacts to human health and safety given the management procedures in place.

4.0 FINDINGS AND CONCLUSIONS

This EA is intended to be a concise public document that provides sufficient evidence and analysis for determining whether to prepare a FNSI or an EIS. NEPA requires agencies of the Federal Government conduct this type of environmental impact analysis in order to evaluate major federal actions. These include projects financed, assisted, conducted, regulated, or approved by a federal agency that have the potential to affect human health or the environment. In order to determine whether an impact is considered significant as it relates to NEPA, both the context and intensity of potential impacts are considered in addition to their cumulative contribution to existing local and regional resource conditions and trends.

The context of an impact relates to the setting in which the impact takes place and the anticipated severity of the impact in terms of the type, quality, and sensitivity of the resource involved; the location of the proposed project; the duration of the effect (short- or long-term) and other considerations of context. For example, an increase in traffic on a local roadway connecting two buildings would likely affect traffic just in the local area, and the context of the impact would be the local street system. On the other hand, closure of an interstate highway could have impacts on local, regional, and even national circulation. In this case, the context of the impact would need to be assessed on a local, regional, and national level. Context also takes into account the existing condition of the resource.

The intensity of an impact is related to the magnitude of the change over the existing conditions. Based on the previous example, increasing traffic on a local roadway by five trucks a day may be a very low-intensity impact if current trips average 100 trucks per day, but would be a high-intensity impact if current trips averaged one truck per day.

A summary of the potential impacts and measures to minimize adverse impacts is provided in Table 4-1. Adverse impacts associated with implementing the Proposed Action at JFTB Los Alamitos would be local in context with the exception of air quality, noise, and transportation, which although regional in context, would still only constitute a minor adverse impact due to very low levels of anticipated emissions, noise, and increased traffic. Likewise, the intensity of potential adverse impacts is anticipated to be less than significant for all resources evaluated. Implementation of the Proposed Action would also have direct, beneficial impacts to the local economy.

Cumulative impact is the effect on the environment that results from the incremental result of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7).

Implementing the Proposed Action would result in minor contributions to adverse cumulative impacts. USAR operations associated with the Proposed Action would result in minor contributions to air and noise emissions. These impacts would combine with impacts associated with ongoing growth and development in the vicinity of project and existing air and noise

emissions on and off of the Installation. Given the minor intensity of these impacts, the Proposed Action is not anticipated to result in a significant adverse cumulative impact, even when taken in conjunction with the existing adjacent land uses and growth of the communities surrounding the proposed sites.

Based on the analysis contained herein, it is the conclusion of this EA that neither the implementation of the Proposed Action, nor the No Action Alternative, would constitute a major federal action with significant impact on human health or the environment. This EA recommends a FNSI should be issued to complete the NEPA documentation process.

Table 4-1. Summary of Potential Impacts and Measures to Minimize Impacts for the Proposed Action

Resource Area	Level of Impact			Summary of Potential Impacts and Measures to Minimize Impacts
	Significant	Less than Significant	No Impact	
Land use		X		There would be no direct, indirect, or cumulative impacts to land use on or off JFTB Los Alamitos as a result of the Company stationing action. The Company would use existing facilities at the Installation. Operations would be consistent with current activities in use at these facilities. No new construction or changes to existing land use categorizations would result from the Proposed Action.
Topography, Geology, and Soils		X		Stationing the Company at JFTB Los Alamitos and subsequent training missions do not involve any ground disturbance. No adverse impacts to topography, geology, or soils are anticipated.
Hydrology and Water Resources		X		Stationing the Company at JFTB Los Alamitos and subsequent training missions would not result in any modifications to existing surface water drainages or groundwater resources. The Company would comply with the Installation's SPCC Plan and SWPPP to prevent oil products and hazardous substances from reaching waterways. Activities associated with the Proposed Action would be consistent with existing operations on the Installation. No adverse impacts to hydrology or water resources are anticipated.
Biological Resources and Wetlands		X		No ground disturbing activities resulting in loss of habitat would occur because the Company would use existing buildings and airfield infrastructure to perform mission requirements. The introduction of additional aircraft would increase the risk of wildlife/aircraft strike hazards. However, due to the small number of additional flights the Company would add to the Installation's existing daily flights, no direct or indirect long term or short term adverse impacts to biological resources are anticipated.

Resource Area	Level of Impact			Summary of Potential Impacts and Measures to Minimize Impacts
	Significant	Less than Significant	No Impact	
Cultural Resources			X	The Company would not be conducting ground disturbing activities or modifications to any buildings under the Proposed Action. No adverse impacts to cultural resources are anticipated.
Air Quality		X		Air emissions from vehicles, aircraft, and equipment associated with the Company stationing action are anticipated to result in a less than significant, adverse impact to local and regional air quality.
Visual Resources			X	Company stationing and subsequent training activities at JFTB Los Alamitos will not result in impacts to visual resources. Black Hawk helicopters are already in use by the CAARNG at the Installation. The Company may conduct some nighttime flying, however most activities would occur over undeveloped and unpopulated areas. The Company would use existing facilities at the Installation and would not require the construction of new buildings or structures.
Noise		X		Minor, long-term adverse impacts to the noise environment are expected to result from operations associated with the Company. Black Hawk helicopters are already in use at the Installation, along with other rotary wing and fixed wing aircraft. Due to the existing noise environment, the addition of the USAR helicopters is anticipated to result in less than significant impacts.
Socioeconomics and Environmental Justice		X		Minor long term beneficial impacts would result from the stationing of the Company at JFTB Los Alamitos. Reservists will travel to the area one weekend a month, which will benefit the local economy.
Transportation and Circulation		X		No significant direct or indirect impacts are anticipated as a result of the Proposed Action. The minor increase in traffic would be negligible in terms of regional transportation and circulation.
Utilities			X	The Company would use existing utilities located on JFTB Los Alamitos. The existing utilities infrastructure has enough capacity to support the Proposed Action. No impacts are anticipated.
Hazardous and Toxic Substances		X		Long-term minor adverse impacts related to hazardous materials and waste would be expected as a result of the Proposed Action. There would be an increased use of materials such as petroleum, oils and lubricants, and solvents from maintenance activities. All hazardous materials and waste would be handled in accordance with local, state, and federal regulations and in accordance with the Installation's procedures established in the HMWMP, HMBP, SWPPP, and SPCC Plan. Personnel from the Company that would operate or perform maintenance on helicopters and equipment or perform fueling activities would receive training on the Installation's plans and procedures.

Resource Area	Level of Impact			Summary of Potential Impacts and Measures to Minimize Impacts
	Significant	Less than Significant	No Impact	
Human Health and Safety		X		No significant long term or short term adverse impacts to human health and safety would be expected. Helicopter flights would use established and approved flight paths. The Proposed Action would not result in a significant impact on local fire, rescues, or law enforcement services, or medical facilities. No adverse impacts to children are expected.

JFTB-Joint Forces Training Base; **SPCC**- Spill Prevention, Control, and Countermeasures; **SWPPP**- Stormwater Pollution Prevention Plan; **CAARNG**- California Army National Guard; **HMWMP**- Hazardous Materials and Waste Management Plan; **HMBP**- Hazardous Materials Business Plan

5.0 REFERENCES

- American Community Survey. 2009.** U.S. Census. [Online] [Accessed: November 11, 2010]
http://factfinder.census.gov/servlet/ADPTable?_bm=y&-geo_id=05000US06059&-qr_name=ACS_2009_1YR_G00_DP3&-context=adp&-ds_name=&-tree_id=309&-_lang=en&-redoLog=false&-format=.
- CAARNG (California Army National Guard). 1994.** *Final Air Installation Compatible Use Zone (AICUZ) Study, Armed Forces Reserve Center, Los Alamitos Army Airfield, Los Alamitos, Orange County, California.* 15 May 1994.
- CAARNG (California Army National Guard). 2002.** *Programmatic Environmental Assessment for Fielding of UH-60 Black Hawk Helicopters.* April 2002.
- CAARNG (California Army National Guard). 2004.** *Integrated Cultural Resources Management Plan for the California Army National Guard 2005-2009.* November 2004.
- CAARNG (California Army National Guard). 2006.** *Operations Manual for JFTB Los Alamitos, Volume 1 (JFTB Regulation 95-1).* 1 October 2006.
- CAARNG (California Army National Guard). 2007a.** *Final Sustainability Analysis Report for the Joint Forces Training Base Los Alamitos, California.* December 2007.
- CAARNG (California Army National Guard). 2007b.** *The California Army National Guard: History and Current Mission.* [Online] [Accessed: November 1, 2010]
<http://www.calguard.ca.gov/sli/Pages/History.aspx>.
- CAARNG (California Army National Guard). 2009.** *Final Environmental Condition of Property/Environmental Site Assessment for Joint Forces Training Base Los Alamitos, Orange County, California.* July 2009.
- CAARNG (California Army National Guard). 2010.** *Los Alamitos Joint Forces Training Base Real Property Development Plan.* June 2010.
- CAARNG (California Army National Guard). Undated.** *Helicopter Procedure Guide for Los Alamitos Army Airfield, Joint Forces Training Base Los Alamitos, CA.*
- CAARNG (California Army National Guard) and USAR (U.S. Army Reserve). 2010.** *Environmental Assessment for Proposed California Army National Guard & U.S. Army Reserve Construction of New Headquarters Facilities at JFTB Los Alamitos, California.* July 2010.
- CARB (California Air Resources Board) 2011.** 2010 State Area Designations approved by CARB on March 25, 2010. [Online] [Accessed: January 4, 2011].
<http://www.arb.ca.gov/desig/adm/adm.htm>.

DA (Department of the Army). 2007. *Army Regulation 200-1, Environmental Protection and Enhancement*. Washington, District of Columbia: Headquarters, Department of the Army.

DoD (Department of Defense). 2002. *32 Code of Federal Regulations Part 651, Environmental Analysis of Army Actions; Final Rule*. Department of the Army. March 29, 2002.

DoD (Department of Defense). 2005. *Operational Noise Manual: An Orientation for Department of Defense Facilities*. November.

DoDPIF (Department of Defense Partners in Flight). 2002. *The Conservation and Management of Migratory and Resident Landbirds and Their Habitats on Department of Defense Lands*. Partners in Flight: Bird Conservation Database. [Accessed: September 28, 2010.] <http://www.dodpif.org>.

DoDPIF (Department of Defense Partners in Flight). 2004. *Department of Defense Partners in Flight Fact Sheet # 6*. Partners in Flight: Bird Conservation Database. [Accessed: November 25, 2009.] <http://www.dodpif.org>.

DoDPIF (Department of Defense Partners in Flight). 2010. *Department of Defense Partners in Flight Fact Sheet # 4*. Bird/Animal Aircraft Strike Hazard (BASH): Linking Aviation Safety and Conservation. [Online] [Accessed: January 16, 2011.] http://www.dodpif.org/downloads/factsheet04_BASH.pdf.

DoDPIF (Department of Defense Partners in Flight). 2011. *Working Group: Bird/Animal Aircraft Strike Hazard*. [Online] [Accessed: January 16, 2011.] <http://www.dodpif.org/groups/bash.php>.

Flather, C. and J. Sauer. 1996. *Using Landscape Ecology to Test Hypotheses about Large-scale Abundance Patterns in Migratory Birds*. Ecology. Vol. 77, Issue 1, pp. 28-35.

Herzog, Laura. 2011. Sara Jackson, Vernadero Group Incorporated, Personal communication via telephone with Laura Herzog, Public Affairs Officer. January 10, 2011.

LAAAF (Los Alamitos Army Airfield). Undated. *Procedure for Handling Noise Complaint*. Internal Procedure Guide.

Lewis, G. 2010, 2011. Sara Jackson, Vernadero Group Incorporated, Personal communication via email with George Lewis, LTC, DCSFOR, 11th Aviation Command. October 14, 2010 – February 28, 2011.

Los Alamitos 1998. Los Alamitos 2010 General Plan. City of Los Alamitos, California 1998.

MANG (Maryland Army National Guard). 2005. *Environmental Assessment for Fielding CH-47D Helicopters at Weide Army Airfield, Edgewood Area, Aberdeen Proving Ground*. Aberdeen Proving Ground, Maryland: Maryland Army National Guard, Construction and Facilities Management Office, Environmental Section.

Moore, F. R., Gauthreaux, S., Kerlinger, P., and T. Simons. 1993. *Stopover Habitat: Management Implications and Guidelines*. Status and Management of Neotropical Migratory Birds, Gen. Tech. Rep. RM-229. Fort Collins, Colorado: U.S. Forest Service, Rocky Mountain Forest and Range Experiment Station.

NOAA (National Oceanic and Atmospheric Administration). 2011. *Ocean and Coastal Management in California*. Ocean & Coastal Resource Management. 10 January. [Online] [Accessed: January 10, 2011.] <http://coastalmanagement.noaa.gov/mystate/ca.html>.

NRCS (Natural Resources Conservation Service). 2011. *Official Soil Series Descriptions*. USDA Soil Survey Division, View by Name. January 10. [Online] [Accessed: January 10, 2011.] <https://soilseries.sc.egov.usda.gov/osdname.asp>.

Orange County. 2002. Orange County Airport Environs Land Use Plan for Joint Forces Training Base Los Alamitos. Orange County Airport Land Use Commission. December 2002.

Sherry, T., and R. Holmes. 1996. *Winter Habitat Quality, Population Limitation, and Conservation of Neotropical-nearctic Migrant Birds*. Ecology. Vol. 77, Issue 1, pp. 36-48.

Triservices. Undated. *How Does the Department of Defense Assess Noise and its Impacts?* Triservices Community and Environmental Noise Primer. Department of Defense.

USAEC (United States Army Environmental Command). 2010. *NEPA and the Army*. United States Army Environmental Command. December 20. [Online][Accessed: March 7, 2011] <http://aec.army.mil/usaec/nepa/army00.html>

USEPA (United States Environmental Protection Agency). 2009. *Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act*. Washington, District of Columbia: United States Environmental Protection Agency, Office of Water.

USEPA (United States Environmental Protection Agency). 2010. *National Ambient Air Quality Standards*. United States Environmental Protection Agency. [Accessed: April 19, 2010.] <http://www.epa.gov/air/criteria.html>.

USEPA (United States Protection Agency). 2011. Enforcement and Compliance History Online. United States Environmental Protection Agency. [Accessed: January 16, 2011.] <http://www.epa-echo.gov/cgi-bin/ideaotis.cgi>

USFWS (United States Fish and Wildlife Service). 2008. *Birds of Conservation Concern*. Arlington, VA: Division of Migratory Bird Management. U.S. Fish and Wildlife Service. [Accessed: November 30, 2009.] <http://www.fws.gov/migratorybirds/NewReportsPublications/SpecialTopics/BCC2008/BC C200>.

Webster, R. 2009. *Programmatic Socioeconomic Impact Analysis for the Construction and Operations of U.S. Army Reserve Centers*. Virginia Beach, Virginia: Prepared under contract to EEI.

Wilson, R. 2010, 2011. Sara Jackson, Vernadero Group Incorporated, Personal communication via telephone/email with Robert P. Wilson, CW4, AV A Co 2-238th Aviation. October 14, 2010 – February 28, 2011.

6.0 PREPARERS AND CONTRIBUTORS

Dan Becker	Geographic Information Systems Analyst Vernadero Group Incorporated 4422 E. Indian School Road, Suite 101 Phoenix, Arizona 85018 Project role: GIS, map preparation
Karen Collins Project Vernadero	Manager Group Incorporated P.O. Box 433 Ladysmith, Virginia 22501 Project role: baseline conditions, impact assessment, document preparation, technical review
Michael Collins, Ph.D. Vernadero	Principal Planner Group Incorporated 4422 E. Indian School Road, Suite 101 Phoenix, Arizona 85018 Project role: baseline conditions, impact assessment, program management
Cris Howard	Senior Environmental Planner Vernadero Group Incorporated 4422 E. Indian School Road, Suite 101 Phoenix, Arizona 85018 Project role: technical review
Sara Jackson Vernadero P.O. West	Environmental Program Manager Group Incorporated Box 121143 Melbourne, Florida 32912-1143 Project role: project management, baseline conditions, impact assessment, document preparation, technical review
Dave Maiden Quality	Control Officer Vernadero Group Incorporated 4422 E. Indian School Road, Suite 101 Phoenix, Arizona 85018 Project role: baseline conditions, technical review, quality assurance
Jim Mayer Project	Manager Vernadero Group Incorporated 4422 E. Indian School Road, Suite 101 Phoenix, Arizona 85018 Project role: impact assessment

FORMAT PAGE

7.0 DISTRIBUTION LIST

California Department of Fish and Game,
South Coast Region
4949 Viewridge Avenue
San Diego, California 92123

City of Hawaiian Gardens
21815 Pioneer Boulevard
Hawaiian Gardens, CA 90716

City of Long Beach
333 West Ocean Boulevard, 14th Floor
Long Beach, California 90802

City of Los Alamitos
3191 Katella Avenue
Los Alamitos, California 90720

City of Seal Beach
211 8th Street
Seal Beach, CA 90740

City of Westminster
Westminster Civic Center
8200 Westminster Blvd.
Westminster, CA 92683

City of Cypress
5275 Orange Avenue
Cypress, CA 90630

California Native American Heritage
Commission
915 Capitol Mall, Room 364
Sacramento, California 95814

South Coast Air Quality Management
District
Planning, Rule Development, and Area
Sources
21865 Copley Drive
Diamond Bar, California 91765

Carlsbad Fish and Wildlife Office
610 Hidden Valley Road
Carlsbad, California 92011

City of Garden Grove
11222 Acacia Parkway
Garden Grove, CA 92840

West Garden Grove Branch Library
11962 Bailey Street
Garden Grove, California 92845

Los Alamitos/Rossmoor Library
12700 Montecito Road
Seal Beach, California 90740

California State Clearing House
1400 Tenth Street
Sacramento, California 95812-3044

State Historic Preservation Officer
Office of Historic Preservation
1416 9th Street, Room 1442-7
Sacramento, California 95814

State of California
Military Department – California Army
National Guard
Environmental Programs Directorate- JFHQ
10620 Mather Boulevard
Mather, California 95655-4176

FORMAT PAGE

8.0 LIST OF INDIVIDUALS AND AGENCIES CONSULTED

John Bahorski, City Manager, City of Cypress

Art Bashmakian, Planning Manager, City of Westminster

Douglas Bryceson, Conservation Program Manager, CAARNG

Laura Caballero, Chief, Environmental Branch, 63d RSC

Carmen Call, Environmental Protection Specialist, 63d RSC

Dave Carmany, City Manager, City of Seal Beach

Joe Colombo, Community Development Director, City of Hawaiian Gardens

Mark Cutler, Realty Specialist, 63d RSC

Milford Wayne Donaldson, California State Historic Preservation Officer, Office of Historic Preservation

Kevin Doty, Supervisor, ASF Victorville/Los Alamitos, 11th Aviation Command

Ed Eckerle, Program Supervisor, Planning, Rule Development, and Area Sources,
South Coast Air Quality Management District

Matthew Fertal, City Manager, City of Garden Grove

Lupe Guerrero, Area Environmental Manager, 63d RSC

Laura Herzog, Public Affairs Officer, JFTB Los Alamitos, CAARNG

LTC Kenneth Koop, Deputy Director, Environmental Programs, CAARNG

Donald D. Lamm, City Manager, City of Westminster

COL (R) Gary Landrith, Training Site Coordinator, CAARNG

LTC George Lewis, DCSFOR, 11th Aviation Command

LTC (R) Terry Morgan, JFTB Chief of Staff, CAARNG

LTC Michael Odom, Division Chief, Operations and Plans, USARC Aviation Directorate

Mr. Ed Pert, Regional Manager, South Coast Region, California Department of Fish and Game

Jeffrey L. Stewart, City Manager, City of Los Alamitos

Tom Tandoc, Associate Environmental Planner, CAARNG

LTC Kelly Thies, Chief, Plans, Analysis, and Integration, 63d RSC

Ms. Debbie Pilas-Treadway, California Native American Heritage Commission

Jill Terp, Division Chief, Carlsbad Fish and Wildlife Office

Lea Umnas Choum, Land Use Manager, Facilities Division, John Wayne Airport

Patrick H. West, City Manager, City of Long Beach

CW4 Robert Wilson, A Co. 2-238th Aviation

APPENDIX A. RECORD OF NON-APPLICABILITY

RECORD OF NON-APPLICABILITY

Project Name: Stationing a Black Hawk Helicopter Company at Joint Forces Training Area Los Alamitos, California

Point of Contact: Carmen Call, NEPA Program Manager, 63d RSC

Phone/E-mail: (650) 279-1823; carmen.call@usar.army.mil

Project Description:

The United States Army Reserve (USAR) proposes to station a Black Hawk Company at Joint Forces Training Base (JFTB) Los Alamitos. The Company includes A Company 2-238th Aviation (AVN) Regiment and Detachment 1 from D and E Companies. The Company consists of 29 full-time personnel and 58 part-time Reserve Soldiers and includes 8 UH-60 Black Hawk helicopters, 2 High Mobility Multipurpose Wheeled Vehicles (HMMWV), 3 Heavy Expanded Mobility Tactical Trucks (HEMTT), 1 flatbed trailer, and 3 fuel trailers. The Company is stationed at Aviation Support Facility (ASF) Victorville at the Southern California Logistics Airport in San Bernardino County, California. ASF Victorville is located approximately 90 miles northeast of downtown Los Angeles and 95 miles northeast of JFTB Alamitos.

Conformity Determination:

General Conformity under the Clean Air Act, Section 176 has been evaluated according to the requirements of Title 40 of the Code of Federal Regulations (CFR) Part 93, Subpart B. The requirements of this rule are not applicable to the Proposed Action or the alternatives because:

Total direct and indirect emissions from this project/action are below the conformity threshold values established at 40 CFR 93.153 (b) AND this project/action is not considered regionally significant under 40CFR 93.153 (i).

Supporting Documentation:

- () Attached
- (X) Appears in the NEPA Document – Environmental Assessment for Stationing a Black Hawk Helicopter Company at Joint Forces Training Base Los Alamitos, California (Section 3.7, Air Quality).
- () Other – Not necessary

Laura Caballero Date
Chief, Environmental Branch
63d RSC

APPENDIX B. AGENCY COORDINATION LETTERS AND RESPONSES



**VERNADERO
GROUP**
INCORPORATED

CONSULTING PLANNERS,
SCIENTISTS & ENGINEERS
SPECIALIZING IN THE US ARMY
ENVIRONMENTAL PROGRAM

Corresponding Office:

Southeast Region
P.O. Box 121143
West Melbourne, Florida 32912
(321) 725-0667

Corporate Office:

Phoenix, Arizona
4422 East Indian School Road
Suite 101
Phoenix, Arizona 85018
(480) 315-1000
(480) 315-1001 fax

Regional Project Offices:

Fort Huachuca, Arizona
500 North Garden Avenue
Suite S1A-109
Sierra Vista, Arizona 85635
(520) 459-2108

East Region
P.O. Box 433
Ladysmith, Virginia 22501
(804) 448-8305

South Region
P.O. Box 296
140 Sheffield Lane
Mount Ida, Arkansas 71957
(501) 276-1472

West Region
P.O. Box 1321
Claremont, California 91711
(480) 246-4248

Environmental and Natural
Resource Regulatory Compliance

Facility Planning, Engineering
& Infrastructure Management

Geographic Information
System Consulting

www.vernadero.com

30 November 2010

Mr. Ed Pert
Regional Manager, South Coast Region
California Department of Fish and Game
4949 Viewridge Avenue
San Diego, California 92123

RE: Environmental Assessment – Stationing a Black Hawk Helicopter
Company at Joint Forces Training Base Los Alamitos, California

Dear Mr. Pert,
Vernadero Group Incorporated, on behalf of the United States Army
Reserve (USAR), is preparing an Environmental Assessment (EA) to
analyze the potential environmental effects of stationing a Black Hawk
Company at Joint Forces Training Base Los Alamitos, Orange
County, California. A regional location map and site map are attached.

The Proposed Action, which is the Army's preferred alternative,
involves stationing a 66-member Aviation Company at JFTB Los
Alamitos. The Company includes A Company 2-238th AVN Regiment
and Detachment 1 from D and E Companies. Its wartime mission is to
provide aerial Command and Control support, limited air assault, and
air movement for the corps and higher level commands. The
Company consists of 15 full-time personnel and 51 part-time Reserve
Soldiers and includes eight HH-60 Black Hawk helicopters, three High
Mobility Multipurpose Wheeled Vehicles (HMMWV), two Heavy
Expanded Mobility Tactical Trucks (HEMTT), one flatbed trailer, and
two fuel trailers.

The Company will be collocated with other USAR units in existing
hangar space at JFTB Los Alamitos. The Company would perform
light helicopter maintenance and conduct flight training operations
including departure and landing exercises. The helicopters would
utilize airspace and follow flight patterns already being used by fixed-
wing and rotary-wing aircraft that train at the Installation.

During the course of this EA, detailed investigations will be
undertaken to identify potential environmental impacts related to the
improvements being considered. These impacts will be documented
in the EA as required by the National Environmental Policy Act
(NEPA). In addition to meeting the requirements of NEPA, compliance
with other relevant environmental regulations (Section 7 of the

Endangered Species Act, Section 106 of the National Historic Preservation Act, etc.) will be accomplished during this EA.

As part of the early coordination and NEPA scoping process, we are identifying key issues that will need to be addressed by this study. Please provide any relevant information regarding threatened, endangered, and candidate species that may occur within the project area, and have the potential to be impacted by rotary-wing aircraft. Any preliminary data your office can provide will be evaluated and incorporated into the EA.

In order to sufficiently address key project issues while maintaining the project schedule, we are requesting you provide a written response to this letter within 30 days of receipt.

Please send your responses to:

Ms. Sara Jackson
Vernadero Group Incorporated
PO Box 121143
West Melbourne, FL 32912

Please feel free to contact me at (321) 725-0667 or by e-mail at sjackson@vernadero.com should you have any questions or concerns. We look forward to working cooperatively with you to make this important project successful for all parties involved.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Sara M Jackson', with a long horizontal flourish extending to the right.

Sara Jackson, REM
Environmental Program Manager



VERNADERO GROUP

INCORPORATED

CONSULTING PLANNERS,
SCIENTISTS & ENGINEERS
SPECIALIZING IN THE US ARMY
ENVIRONMENTAL PROGRAM

Corresponding Office:

Southeast Region
P.O. Box 121143
West Melbourne, Florida 32912
(321) 725-0667

Corporate Office:

Phoenix, Arizona
4422 East Indian School Road
Suite 101
Phoenix, Arizona 85018
(480) 315-1000
(480) 315-1001 fax

Regional Project Offices:

Fort Huachuca, Arizona
500 North Garden Avenue
Suite S1A-109
Sierra Vista, Arizona 85635
(520) 459-2108

East Region
P.O. Box 433
Ladysmith, Virginia 22501
(804) 448-8305

South Region
P.O. Box 296
140 Sheffield Lane
Mount Ida, Arkansas 71957
(501) 276-1472

West Region
P.O. Box 1321
Claremont, California 91711
(480) 246-4248

Environmental and Natural
Resource Regulatory Compliance

Facility Planning, Engineering
& Infrastructure Management

Geographic Information
System Consulting

www.vernadero.com

30 November 2010

Joe Colombo
Community Development Director
City of Hawaiian Gardens
21815 Pioneer Boulevard
Hawaiian Gardens, CA 90716

RE: Environmental Assessment – Stationing a Black Hawk
Helicopter Company at Joint Forces Training Base Los Alamitos,
California

Dear Mr. Colombo,

Vernadero Group Incorporated, on behalf of the United States Army Reserve (USAR), is preparing an Environmental Assessment (EA) to analyze the potential environmental effects of stationing a Black Hawk Company at Joint Forces Training Base Los Alamitos, Orange County, California. A regional location map and site map are attached.

The Proposed Action, which is the Army's preferred alternative, involves stationing a 66-member Aviation Company at JFTB Los Alamitos. The Company includes A Company 2-238th AVN Regiment and Detachment 1 from D and E Companies. Its wartime mission is to provide aerial Command and Control support, limited air assault, and air movement for the corps and higher level commands. The Company consists of 15 full-time personnel and 51 part-time Reserve Soldiers and includes eight HH-60 Black Hawk helicopters, three High Mobility Multipurpose Wheeled Vehicles (HMMWV), two Heavy Expanded Mobility Tactical Trucks (HEMTT), one flatbed trailer, and two fuel trailers.

The Company will be collocated with other USAR units in existing hangar space at JFTB Los Alamitos. The Company would perform light helicopter maintenance and conduct flight training operations including departure and landing exercises. The helicopters would utilize airspace and follow flight patterns already being used by fixed-wing and rotary-wing aircraft that train at the Installation.

During the course of this EA, detailed investigations will be undertaken to identify potential environmental impacts related to the improvements being considered. These impacts will be documented in the EA as required by the National Environmental Policy Act (NEPA). In addition to

meeting the requirements of NEPA, compliance with other relevant environmental regulations (Section 7 of the Endangered Species Act, Section 106 of the National Historic Preservation Act, etc.) will be accomplished during this EA.

As part of the early coordination and NEPA scoping process, we are identifying key issues that will need to be addressed by this study. Please provide comments relative to specific issues or geographic areas of concern your office may have, based on your expertise or regulatory jurisdiction. Any preliminary data your office can provide will be evaluated and incorporated into the EA.

In order to sufficiently address key project issues while maintaining the project schedule, we are requesting you provide a written response to this letter within 30 days of receipt.

Please send your responses to:

Ms. Sara Jackson
Vernadero Group Incorporated
PO Box 121143
West Melbourne, FL 32912

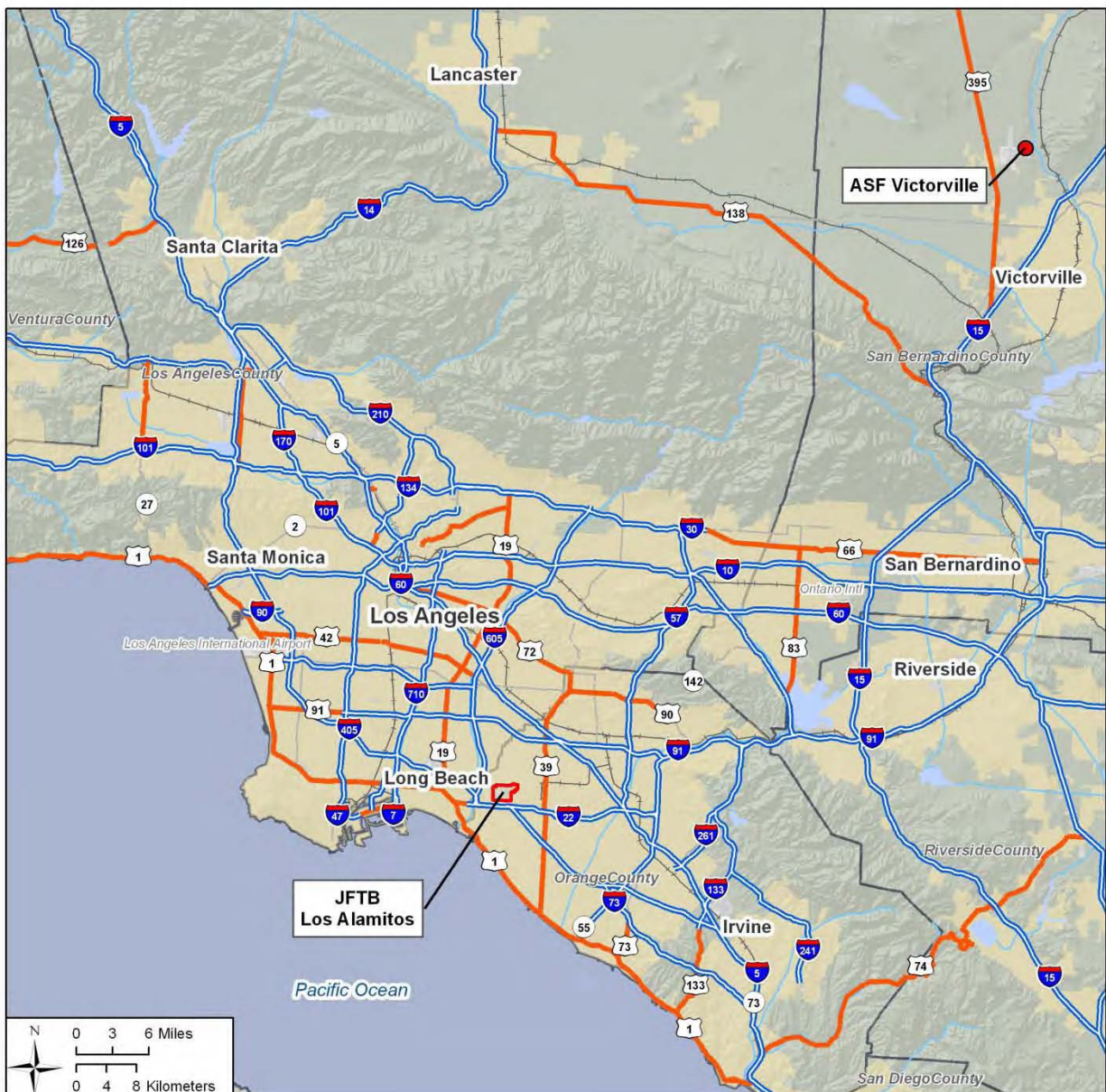
Please feel free to contact me at (321) 725-0667 or by e-mail at sjackson@vernadero.com should you have any questions or concerns. We look forward to working cooperatively with you to make this important project successful for all parties involved.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Sara M Jackson', with a long horizontal flourish extending to the right.

Sara Jackson, REM
Environmental Program Manager

Regional Location Map



Legend

- Interstate
- Highway
- Major Road
- Rivers
- JFTB Property Boundary
- Inland Water Bodies
- Urbanized Areas
- County Boundaries

Source: ESRI Streetmap 2009

Site Map



Legend

Areas of Interest



**VERNADERO
GROUP**
INCORPORATED

CONSULTING PLANNERS,
SCIENTISTS & ENGINEERS
SPECIALIZING IN THE US ARMY
ENVIRONMENTAL PROGRAM

Corresponding Office:

Southeast Region
P.O. Box 121143
West Melbourne, Florida 32912
(321) 725-0667

Corporate Office:

Phoenix, Arizona
4422 East Indian School Road
Suite 101
Phoenix, Arizona 85018
(480) 315-1000
(480) 315-1001 fax

Regional Project Offices:

Fort Huachuca, Arizona
500 North Garden Avenue
Suite S1A-109
Sierra Vista, Arizona 85635
(520) 459-2108

East Region
P.O. Box 433
Ladysmith, Virginia 22501
(804) 448-8305

South Region
P.O. Box 296
140 Sheffield Lane
Mount Ida, Arkansas 71957
(501) 276-1472

West Region
P.O. Box 1321
Claremont, California 91711
(480) 246-4248

Environmental and Natural
Resource Regulatory Compliance

Facility Planning, Engineering
& Infrastructure Management

Geographic Information
System Consulting

www.vernadero.com

30 November 2010

Patrick H. West
City Manager
City of Long Beach
333 West Ocean Boulevard, 14th Floor
Long Beach, California 90802

RE: Environmental Assessment – Stationing a Black Hawk Helicopter
Company at Joint Forces Training Base Los Alamitos, California

Dear Mr. West,
Vernadero Group Incorporated, on behalf of the United States Army
Reserve (USAR), is preparing an Environmental Assessment (EA) to
analyze the potential environmental effects of stationing a Black Hawk
Company at Joint Forces Training Base Los Alamitos, Orange
County, California. A regional location map and site map are attached.

The Proposed Action, which is the Army's preferred alternative,
involves stationing a 66-member Aviation Company at JFTB Los
Alamitos. The Company includes A Company 2-238th AVN Regiment
and Detachment 1 from D and E Companies. Its wartime mission is to
provide aerial Command and Control support, limited air assault, and
air movement for the corps and higher level commands. The
Company consists of 15 full-time personnel and 51 part-time Reserve
Soldiers and includes eight HH-60 Black Hawk helicopters, three High
Mobility Multipurpose Wheeled Vehicles (HMMWV), two Heavy
Expanded Mobility Tactical Trucks (HEMTT), one flatbed trailer, and
two fuel trailers.

The Company will be collocated with other USAR units in existing
hangar space at JFTB Los Alamitos. The Company would perform
light helicopter maintenance and conduct flight training operations
including departure and landing exercises. The helicopters would
utilize airspace and follow flight patterns already being used by fixed-
wing and rotary-wing aircraft that train at the Installation.

During the course of this EA, detailed investigations will be
undertaken to identify potential environmental impacts related to the
improvements being considered. These impacts will be documented
in the EA as required by the National Environmental Policy Act
(NEPA). In addition to meeting the requirements of NEPA, compliance
with other relevant environmental regulations (Section 7 of the

Endangered Species Act, Section 106 of the National Historic Preservation Act, etc.) will be accomplished during this EA.

As part of the early coordination and NEPA scoping process, we are identifying key issues that will need to be addressed by this study. Please provide comments relative to specific issues or geographic areas of concern your office may have, based on your expertise or regulatory jurisdiction. Any preliminary data your office can provide will be evaluated and incorporated into the EA.

In order to sufficiently address key project issues while maintaining the project schedule, we are requesting you provide a written response to this letter within 30 days of receipt.

Please send your responses to:

Ms. Sara Jackson
Vernadero Group Incorporated
PO Box 121143
West Melbourne, FL 32912

Please feel free to contact me at (321) 725-0667 or by e-mail at sjackson@vernadero.com should you have any questions or concerns. We look forward to working cooperatively with you to make this important project successful for all parties involved.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Sara M Jackson', with a long horizontal flourish extending to the right.

Sara Jackson, REM
Environmental Program Manager



CITY OF LONG BEACH

DEPARTMENT OF DEVELOPMENT SERVICES

333 W. Ocean Boulevard, 5th Floor

Long Beach, CA 90802

(562) 570-6191

FAX (562) 570-6068

December 30, 2010

Ms. Sara Jackson
Vernadero Group Incorporated
PO Box 121143
West Melbourne, FL 32912

RE: Environmental Assessment – Stationing a Black Hawk Helicopter Company at Joint Forces Training Base Los Alamitos, CA

Dear Ms. Jackson:

The City of Long Beach appreciates having the opportunity to provide input prior to the preparation of the Environmental Assessment (EA) for the proposed establishment of a Black Hawk Helicopter Company at the Joint Forces Training Base (JFTB) Los Alamitos, CA. The following comments are submitted for consideration:

- The Black Hawk helicopters will utilize airspace and follow flight patterns already being used by aircraft that train at the JFTB. It is recommended that the EA include graphics (aerials, maps, diagrams) that clearly illustrate the airspace boundary and the existing flight patterns.
- It is recommended that the EA memorialize the hours of operation that the Black Hawk helicopter flight training, including departure and landing exercises, will be conducted.
- It is recommended that the EA include an Air Quality section that documents the best management practices that will be incorporated to minimize the impacts of the Black Hawk helicopters on the existing air quality of the adjacent and surrounding residential neighborhoods.
- The City of Long Beach requests that the Black Hawk helicopter flight patterns avoid the area of El Dorado Regional Park, including the El Dorado Nature Center.

Thank you again for the opportunity to provide input prior to the preparation of the EA for the proposed establishment of a Black Hawk Helicopter Company at the Joint Forces Training Base (JFTB) Los Alamitos, CA. If there are questions regarding the comments included in this letter, I can be reached at 562-570-6191 or at jill.griffiths@longbeach.gov

Sincerely,

Jill Griffiths
Planning Officer



**VERNADERO
GROUP**
INCORPORATED

CONSULTING PLANNERS,
SCIENTISTS & ENGINEERS
SPECIALIZING IN THE US ARMY
ENVIRONMENTAL PROGRAM

Corresponding Office:

Southeast Region
P.O. Box 121143
West Melbourne, Florida 32912
(321) 725-0667

Corporate Office:

Phoenix, Arizona
4422 East Indian School Road
Suite 101
Phoenix, Arizona 85018
(480) 315-1000
(480) 315-1001 fax

Regional Project Offices:

Fort Huachuca, Arizona
500 North Garden Avenue
Suite S1A-109
Sierra Vista, Arizona 85635
(520) 459-2108

East Region
P.O. Box 433
Ladysmith, Virginia 22501
(804) 448-8305

South Region
P.O. Box 296
140 Sheffield Lane
Mount Ida, Arkansas 71957
(501) 276-1472

West Region
P.O. Box 1321
Claremont, California 91711
(480) 246-4248

Environmental and Natural
Resource Regulatory Compliance

Facility Planning, Engineering
& Infrastructure Management

Geographic Information
System Consulting

www.vernadero.com

30 November 2010

Jeffrey L. Stewart
City Manager
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, California 90720

RE: Environmental Assessment – Stationing a Black Hawk Helicopter
Company at Joint Forces Training Base Los Alamitos, California

Dear Mr. Stewart,
Vernadero Group Incorporated, on behalf of the United States Army
Reserve (USAR), is preparing an Environmental Assessment (EA) to
analyze the potential environmental effects of stationing a Black Hawk
Company at Joint Forces Training Base Los Alamitos, Orange
County, California. A regional location map and site map are attached.

The Proposed Action, which is the Army's preferred alternative,
involves stationing a 66-member Aviation Company at JFTB Los
Alamitos. The Company includes A Company 2-238th AVN Regiment
and Detachment 1 from D and E Companies. Its wartime mission is to
provide aerial Command and Control support, limited air assault, and
air movement for the corps and higher level commands. The
Company consists of 15 full-time personnel and 51 part-time Reserve
Soldiers and includes eight HH-60 Black Hawk helicopters, three High
Mobility Multipurpose Wheeled Vehicles (HMMWV), two Heavy
Expanded Mobility Tactical Trucks (HEMTT), one flatbed trailer, and
two fuel trailers.

The Company will be collocated with other USAR units in existing
hangar space at JFTB Los Alamitos. The Company would perform
light helicopter maintenance and conduct flight training operations
including departure and landing exercises. The helicopters would
utilize airspace and follow flight patterns already being used by fixed-
wing and rotary-wing aircraft that train at the Installation.

During the course of this EA, detailed investigations will be
undertaken to identify potential environmental impacts related to the
improvements being considered. These impacts will be documented
in the EA as required by the National Environmental Policy Act
(NEPA). In addition to meeting the requirements of NEPA, compliance
with other relevant environmental regulations (Section 7 of the

Endangered Species Act, Section 106 of the National Historic Preservation Act, etc.) will be accomplished during this EA.

As part of the early coordination and NEPA scoping process, we are identifying key issues that will need to be addressed by this study. Please provide comments relative to specific issues or geographic areas of concern your office may have, based on your expertise or regulatory jurisdiction. Any preliminary data your office can provide will be evaluated and incorporated into the EA.

In order to sufficiently address key project issues while maintaining the project schedule, we are requesting you provide a written response to this letter within 30 days of receipt.

Please send your responses to:

Ms. Sara Jackson
Vernadero Group Incorporated
PO Box 121143
West Melbourne, FL 32912

Please feel free to contact me at (321) 725-0667 or by e-mail at sjackson@vernadero.com should you have any questions or concerns. We look forward to working cooperatively with you to make this important project successful for all parties involved.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Sara M Jackson', with a long horizontal flourish extending to the right.

Sara Jackson, REM
Environmental Program Manager

CITY OF LOS ALAMITOS



Mayor:
Marilynn M. Poe

Mayor Pro Tem:
Ken Stephens

Council Members:
Geri L. Graham - Meija
Troy Edgar
Constantine Zarkos

City Manager:
Jeffrey L. Stewart

December 20, 2010

Sara Jackson
Vernadero Group Incorporated
P. O. Box 121143
West Melbourne, FL 32912

Subject: NEPA EA Notification – Blackhawk Company at Los Alamitos JFTB

Dear Ms. Jackson:

The City of Los Alamitos very much appreciates your reaching out to us in regards to the proposed stationing of a Black Hawk Helicopter Company at the Joint Forces Training Base.

We are in receipt of your NEPA notification dated November 30, 2010 regarding the above referenced proposed activity. We thank you for your compliance with NEPA provisions by making this information available to us and the other jurisdictions/agencies surrounding JFTB Los Alamitos in advance of added studies or the proposed activity actually commencing.

It is our understanding that eight (8) additional rotor wing aircraft, their associated personnel, equipment and support staff will be housed within existing facilities on the base and will operate under existing flight, noise and environmental protocols used by the balance of the JFTB tenants. We also interpret your statement to indicate that approach and departure patterns will not be modified by this company and that all applicable requirements of the surrounding cities as well as the County's AELUP will be adhered to by this proposed tenant.

We look forward to the Environmental Assessment including details of the number of operations per hour, per day, per week, per month and per year as well as information regarding daytime and night time decibel levels.

Thank you again for the opportunity to comment.

Sincerely,

Steven A. Mendoza
Director of Community Development

cc: City Managers of Los Alamitos, Seal Beach, Cypress and Garden Grove
General Manager of Rossmoor Community Services District

3191 Katella Avenue
Los Alamitos, CA
90720-5600

Telephone:
(562) 431-3538

FAX (562) 493-1678

www.ci.Los-Alamitos.ca.us



VERNADERO GROUP

INCORPORATED

CONSULTING PLANNERS,
SCIENTISTS & ENGINEERS
SPECIALIZING IN THE US ARMY
ENVIRONMENTAL PROGRAM

Corresponding Office:

Southeast Region
P.O. Box 121143
West Melbourne, Florida 32912
(321) 725-0667

Corporate Office:

Phoenix, Arizona
4422 East Indian School Road
Suite 101
Phoenix, Arizona 85018
(480) 315-1000
(480) 315-1001 fax

Regional Project Offices:

Fort Huachuca, Arizona
500 North Garden Avenue
Suite S1A-109
Sierra Vista, Arizona 85635
(520) 459-2108

East Region
P.O. Box 433
Ladysmith, Virginia 22501
(804) 448-8305

South Region
P.O. Box 296
140 Sheffield Lane
Mount Ida, Arkansas 71957
(501) 276-1472

West Region
P.O. Box 1321
Claremont, California 91711
(480) 246-4248

Environmental and Natural
Resource Regulatory Compliance

Facility Planning, Engineering
& Infrastructure Management

Geographic Information
System Consulting

www.vernadero.com

30 November 2010

Dave Carmany
City Manager
City of Seal Beach
211 8th Street
Seal Beach, CA 90740

RE: Environmental Assessment – Stationing a Black Hawk
Helicopter Company at Joint Forces Training Base Los Alamitos,
California

Dear Mr. Carmany,

Vernadero Group Incorporated, on behalf of the United States Army Reserve (USAR), is preparing an Environmental Assessment (EA) to analyze the potential environmental effects of stationing a Black Hawk Company at Joint Forces Training Base Los Alamitos, Orange County, California. A regional location map and site map are attached.

The Proposed Action, which is the Army's preferred alternative, involves stationing a 66-member Aviation Company at JFTB Los Alamitos. The Company includes A Company 2-238th AVN Regiment and Detachment 1 from D and E Companies. Its wartime mission is to provide aerial Command and Control support, limited air assault, and air movement for the corps and higher level commands. The Company consists of 15 full-time personnel and 51 part-time Reserve Soldiers and includes eight HH-60 Black Hawk helicopters, three High Mobility Multipurpose Wheeled Vehicles (HMMWV), two Heavy Expanded Mobility Tactical Trucks (HEMTT), one flatbed trailer, and two fuel trailers.

The Company will be collocated with other USAR units in existing hangar space at JFTB Los Alamitos. The Company would perform light helicopter maintenance and conduct flight training operations including departure and landing exercises. The helicopters would utilize airspace and follow flight patterns already being used by fixed-wing and rotary-wing aircraft that train at the Installation.

During the course of this EA, detailed investigations will be undertaken to identify potential environmental impacts related to the improvements being considered. These impacts will be documented in the EA as required by the National Environmental Policy Act (NEPA). In addition to

meeting the requirements of NEPA, compliance with other relevant environmental regulations (Section 7 of the Endangered Species Act, Section 106 of the National Historic Preservation Act, etc.) will be accomplished during this EA.

As part of the early coordination and NEPA scoping process, we are identifying key issues that will need to be addressed by this study. Please provide comments relative to specific issues or geographic areas of concern your office may have, based on your expertise or regulatory jurisdiction. Any preliminary data your office can provide will be evaluated and incorporated into the EA.

In order to sufficiently address key project issues while maintaining the project schedule, we are requesting you provide a written response to this letter within 30 days of receipt.

Please send your responses to:

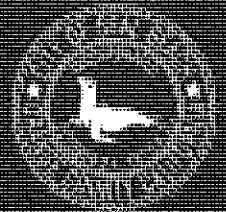
Ms. Sara Jackson
Vernadero Group Incorporated
PO Box 121143
West Melbourne, FL 32912

Please feel free to contact me at (321) 725-0667 or by e-mail at sjackson@vernadero.com should you have any questions or concerns. We look forward to working cooperatively with you to make this important project successful for all parties involved.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Sara M Jackson', with a long horizontal flourish extending to the right.

Sara Jackson, REM
Environmental Program Manager



CITY HALL, 211 THURSTON STREET
SEAL BEACH, CALIFORNIA 92674
(949) 414-2527 • www.ci.seal-beach.ca.us

January 6, 2011

Ms. Sara Jackson
Vernadero Group Incorporated
PO Box 121143
West Melbourne, FL 32912

Dear Ms. Jackson:

SUBJECT: Environmental Assessment (EA) Early Coordination
"Black Hawk Helicopter Company at Joint Forces Training Base Los Alamitos,
California"

Thank you for the opportunity to provide input regarding the above referenced project.

Based upon the information provided in the letter dated November 30, 2010, the eight Black Hawk helicopters and related personnel and equipment will be collocated with other USAR units in existing hangar space at the JFTB. The letter also indicates that the new equipment will utilize the same airspace and flight patterns used by existing aircraft at the installation. The City of Seal Beach expects that the new company will also follow the adopted Airport Environs Land Use Plan for the JFTB.

We look forward to the EA including details on the number of operations per hour, week and month, with particular emphasis on nighttime operations. The EA should also indicate noise levels for daytime and night time operations of the additional aircraft and related personnel and equipment. Finally the EA should indicate if any existing facilities will be modified or expanded.

Thank you for your time and consideration of our comments. If you have any questions I can be reached at (562) 431-2527, x. 1313, or mpersico@ci.seal-beach.ca.us.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark Persico".

Mark Persico, AICP
Director of Development Services

cc:
Mayor and City Council
City Manager
City of Los Alamitos and Cypress



VERNADERO GROUP

INCORPORATED

CONSULTING PLANNERS,
SCIENTISTS & ENGINEERS
SPECIALIZING IN THE US ARMY
ENVIRONMENTAL PROGRAM

Corresponding Office:

Southeast Region
P.O. Box 121143
West Melbourne, Florida 32912
(321) 725-0667

Corporate Office:

Phoenix, Arizona
4422 East Indian School Road
Suite 101
Phoenix, Arizona 85018
(480) 315-1000
(480) 315-1001 fax

Regional Project Offices:

Fort Huachuca, Arizona
500 North Garden Avenue
Suite S1A-109
Sierra Vista, Arizona 85635
(520) 459-2108

East Region
P.O. Box 433
Ladysmith, Virginia 22501
(804) 448-8305

South Region
P.O. Box 296
140 Sheffield Lane
Mount Ida, Arkansas 71957
(501) 276-1472

West Region
P.O. Box 1321
Claremont, California 91711
(480) 246-4248

Environmental and Natural
Resource Regulatory Compliance

Facility Planning, Engineering
& Infrastructure Management

Geographic Information
System Consulting

www.vernadero.com

30 November 2010

Donald D. Lamm
City Manager
City of Westminster
Westminster Civic Center
8200 Westminster Blvd.
Westminster, CA 92683

RE: Environmental Assessment – Stationing a Black Hawk Helicopter
Company at Joint Forces Training Base Los Alamitos, California

Dear Mr. Lamm,

Vernadero Group Incorporated, on behalf of the United States Army Reserve (USAR), is preparing an Environmental Assessment (EA) to analyze the potential environmental effects of stationing a Black Hawk Company at Joint Forces Training Base Los Alamitos, Orange County, California. A regional location map and site map are attached.

The Proposed Action, which is the Army's preferred alternative, involves stationing a 66-member Aviation Company at JFTB Los Alamitos. The Company includes A Company 2-238th AVN Regiment and Detachment 1 from D and E Companies. Its wartime mission is to provide aerial Command and Control support, limited air assault, and air movement for the corps and higher level commands. The Company consists of 15 full-time personnel and 51 part-time Reserve Soldiers and includes eight HH-60 Black Hawk helicopters, three High Mobility Multipurpose Wheeled Vehicles (HMMWV), two Heavy Expanded Mobility Tactical Trucks (HEMTT), one flatbed trailer, and two fuel trailers.

The Company will be collocated with other USAR units in existing hangar space at JFTB Los Alamitos. The Company would perform light helicopter maintenance and conduct flight training operations including departure and landing exercises. The helicopters would utilize airspace and follow flight patterns already being used by fixed-wing and rotary-wing aircraft that train at the Installation.

During the course of this EA, detailed investigations will be undertaken to identify potential environmental impacts related to the improvements being considered. These impacts will be documented in the EA as required by the National Environmental Policy Act (NEPA). In addition to

meeting the requirements of NEPA, compliance with other relevant environmental regulations (Section 7 of the Endangered Species Act, Section 106 of the National Historic Preservation Act, etc.) will be accomplished during this EA.

As part of the early coordination and NEPA scoping process, we are identifying key issues that will need to be addressed by this study. Please provide comments relative to specific issues or geographic areas of concern your office may have, based on your expertise or regulatory jurisdiction. Any preliminary data your office can provide will be evaluated and incorporated into the EA.

In order to sufficiently address key project issues while maintaining the project schedule, we are requesting you provide a written response to this letter within 30 days of receipt.

Please send your responses to:

Ms. Sara Jackson
Vernadero Group Incorporated
PO Box 121143
West Melbourne, FL 32912

Please feel free to contact me at (321) 725-0667 or by e-mail at sjackson@vernadero.com should you have any questions or concerns. We look forward to working cooperatively with you to make this important project successful for all parties involved.

Sincerely,

A handwritten signature in dark ink, appearing to read "Sara M Jackson", with a long horizontal flourish extending to the right.

Sara Jackson, REM
Environmental Program Manager

From: [Sara Jackson](#)
To: ["Bashmakian, Art"](#)
Subject: RE: Environmental Assessment-Stationing Black Hawk Helicopters...at JFTB.
Date: Wednesday, January 05, 2011 4:15:00 PM
Attachments: [SLI HPG FINAL.PDF](#)

Mr. Bashmakian-

Thank you for your interest in the Army Reserve's stationing action. I have attached the Helicopter Procedures Guide (HPG) that depicts the arrival and departure routes, along with No Fly Areas. The HPG is the official guide for tenant helicopter units as well as transient civilian/law enforcement and military helicopter operators that use Los Alamitos Army Airfield. The City of Westminster is southeast of the installation and outside of the established arrival and departure routes.

Note that there are also established helicopter routes within the Los Angeles area that exist outside of the installation's control. These routes are part of the National airspace system and are used by a variety of operators for a wide range of purposes including law enforcement, commercial, tourism, emergency operations, news media, etc. These routes typically follow highways – the routes over the 22 and 405 Freeways run through the City of Westminster. These are FAA routes, not routes in and out of Los Alamitos Army Airfield. You can find a copy of the Los Angeles Basin Helicopter Chart on the FAA's website using the following link: http://aeronav.faa.gov/index.asp?xml=aeronav/applications/VFR/chartlist_heli <http://aeronav.faa.gov/index.asp?xml=aeronav/applications/VFR/chartlist_heli> . Click on Los Angeles, then open the file called "Los Angeles Heli 8 Back.tif".

Thank you again for your interest,

Sara Jackson

VERNADERO GROUP INCORPORATED
Consulting Planners, Scientists, and Engineers
Specializing in the US Army Environmental Program

PO Box 121143
West Melbourne, FL 32912-1143
(321) 725-0667 office
(321) 890-3648 cell
(321) 725-7376 fax
www.vernadero.com

=====
This electronic mail transmission contains information from Vernadero Group Incorporated that may be confidential or privileged. Such information is solely for the intended recipient, and use by any other party is not authorized. If you are not the intended recipient, be aware that any disclosure, copying, distribution or use of this message, its contents or any attachments is prohibited. Any wrongful interception of this message is punishable as a Federal Crime. If you have received this message in error, please notify the sender immediately by telephone (480) 315-1000 or by electronic mail at support@vernadero.com.

From: Bashmakian, Art [mailto:ABashmakian@Westminster-CA.gov]
Sent: Thursday, December 16, 2010 12:17 PM
To: sjackson@vernadero.com
Subject: Environmental Assessment-Stationing Black Hawk Helicopters...at JFTB.

Hi Sara

I've been forwarded your letter (dated November 30, 2010) to Donald Lamm, the City Manager of Westminster, regarding the above referenced project. In your letter, you mention the conduct of flight training operations and the use of airspace and flight patterns already being used by fixed-wing and rotary-wing aircraft. Do you have a map that shows the existing flight patterns so that the City can better understand any potential noise impacts?

Thank you

Artashes "Art" Bashmakian, AICP
City of Westminster
Planning Manager
714-548-3484 (direct)
714-548-3247
714-719-1104 (cell)
www.westminster-ca.gov



**VERNADERO
GROUP**
INCORPORATED

CONSULTING PLANNERS,
SCIENTISTS & ENGINEERS
SPECIALIZING IN THE US ARMY
ENVIRONMENTAL PROGRAM

Corresponding Office:

Southeast Region
P.O. Box 121143
West Melbourne, Florida 32912
(321) 725-0667

Corporate Office:

Phoenix, Arizona
4422 East Indian School Road
Suite 101
Phoenix, Arizona 85018
(480) 315-1000
(480) 315-1001 fax

Regional Project Offices:

Fort Huachuca, Arizona
500 North Garden Avenue
Suite S1A-109
Sierra Vista, Arizona 85635
(520) 459-2108

East Region
P.O. Box 433
Ladysmith, Virginia 22501
(804) 448-8305

South Region
P.O. Box 296
140 Sheffield Lane
Mount Ida, Arkansas 71957
(501) 276-1472

West Region
P.O. Box 1321
Claremont, California 91711
(480) 246-4248

Environmental and Natural
Resource Regulatory Compliance

Facility Planning, Engineering
& Infrastructure Management

Geographic Information
System Consulting

www.vernadero.com

30 November 2010

John Bahorski
City Manager
City of Cypress
5275 Orange Avenue
Cypress, CA 90630

RE: Environmental Assessment – Stationing a Black Hawk Helicopter
Company at Joint Forces Training Base Los Alamitos, California

Dear Mr. Bahorski,

Vernadero Group Incorporated, on behalf of the United States Army Reserve (USAR), is preparing an Environmental Assessment (EA) to analyze the potential environmental effects of stationing a Black Hawk Company at Joint Forces Training Base Los Alamitos, Orange County, California. A regional location map and site map are attached.

The Proposed Action, which is the Army's preferred alternative, involves stationing a 66-member Aviation Company at JFTB Los Alamitos. The Company includes A Company 2-238th AVN Regiment and Detachment 1 from D and E Companies. Its wartime mission is to provide aerial Command and Control support, limited air assault, and air movement for the corps and higher level commands. The Company consists of 15 full-time personnel and 51 part-time Reserve Soldiers and includes eight HH-60 Black Hawk helicopters, three High Mobility Multipurpose Wheeled Vehicles (HMMWV), two Heavy Expanded Mobility Tactical Trucks (HEMTT), one flatbed trailer, and two fuel trailers.

The Company will be collocated with other USAR units in existing hangar space at JFTB Los Alamitos. The Company would perform light helicopter maintenance and conduct flight training operations including departure and landing exercises. The helicopters would utilize airspace and follow flight patterns already being used by fixed-wing and rotary-wing aircraft that train at the Installation.

During the course of this EA, detailed investigations will be undertaken to identify potential environmental impacts related to the improvements being considered. These impacts will be documented in the EA as required by the National Environmental Policy Act (NEPA). In addition to

meeting the requirements of NEPA, compliance with other relevant environmental regulations (Section 7 of the Endangered Species Act, Section 106 of the National Historic Preservation Act, etc.) will be accomplished during this EA.

As part of the early coordination and NEPA scoping process, we are identifying key issues that will need to be addressed by this study. Please provide comments relative to specific issues or geographic areas of concern your office may have, based on your expertise or regulatory jurisdiction. Any preliminary data your office can provide will be evaluated and incorporated into the EA.

In order to sufficiently address key project issues while maintaining the project schedule, we are requesting you provide a written response to this letter within 30 days of receipt.

Please send your responses to:

Ms. Sara Jackson
Vernadero Group Incorporated
PO Box 121143
West Melbourne, FL 32912

Please feel free to contact me at (321) 725-0667 or by e-mail at sjackson@vernadero.com should you have any questions or concerns. We look forward to working cooperatively with you to make this important project successful for all parties involved.

Sincerely,

A handwritten signature in dark ink, appearing to read "Sara M Jackson", with a long horizontal flourish extending to the right.

Sara Jackson, REM
Environmental Program Manager



CITY of CYPRESS

5275 Orange Avenue, Cypress, California 90630

Phone 714-229-6700

www.ci.cypress.ca.us

December 14, 2010

Ms. Sara Jackson
Vernadero Group Incorporated
P.O. Box 121143
West Melbourne, FL 32912

Subject: NEPA EA Notification – Blackhawk Company at JFTB Los Alamitos

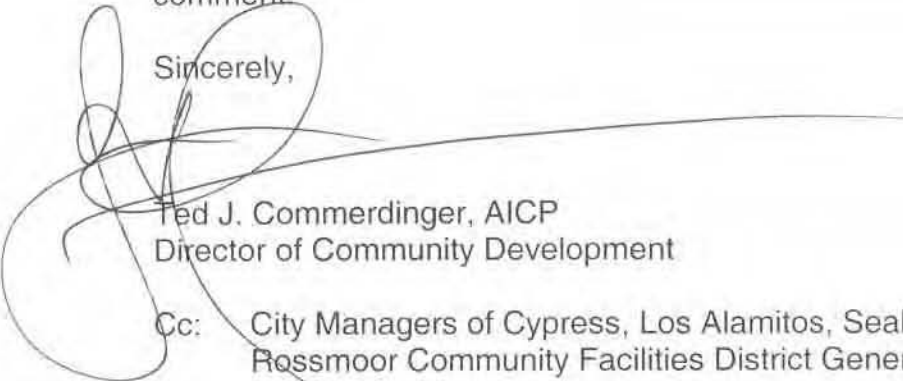
Dear Ms. Jackson:

We are in receipt of your NEPA notification dated November 30, 2010 regarding the above referenced proposed activity. We thank you for your compliance with NEPA provisions by making this information available to us and the other jurisdictions/agencies surrounding JFTB Los Alamitos in advance of added studies or the proposed activity actually commencing.

As described, the eight (8) additional rotor wing aircraft, their associated personnel, equipment and support staff will be housed within existing facilities on the base and will operate under existing flight, noise and environmental protocols used by the balance of the JFTB tenants. We also interpret your statement to indicate that approach and departure patterns will not be modified by this company and that all applicable requirements of the surrounding cities as well as the County's AELUP will be adhered to by this proposed tenant.

Please provide any additional information regarding this proposal as it is generated, including the draft EA. Thank you again for the opportunity to comment

Sincerely,



Ted J. Commerdinger, AICP
Director of Community Development

Cc: City Managers of Cypress, Los Alamitos, Seal Beach and Garden Grove
Rossmoor Community Facilities District General Manager

Prakash Narain, M.D., Mayor

Douglas Bailey, Mayor Pro Tem

Leroy Mills, Council Member

Phil Luebben, Council Member

Todd W. Seymore, Council Member



**VERNADERO
GROUP**
INCORPORATED

CONSULTING PLANNERS,
SCIENTISTS & ENGINEERS
SPECIALIZING IN THE US ARMY
ENVIRONMENTAL PROGRAM

Corresponding Office:

Southeast Region
P.O. Box 121143
West Melbourne, Florida 32912
(321) 725-0667

Corporate Office:

Phoenix, Arizona
4422 East Indian School Road
Suite 101
Phoenix, Arizona 85018
(480) 315-1000
(480) 315-1001 fax

Regional Project Offices:

Fort Huachuca, Arizona
500 North Garden Avenue
Suite S1A-109
Sierra Vista, Arizona 85635
(520) 459-2108

East Region
P.O. Box 433
Ladysmith, Virginia 22501
(804) 448-8305

South Region
P.O. Box 296
140 Sheffield Lane
Mount Ida, Arkansas 71957
(501) 276-1472

West Region
P.O. Box 1321
Claremont, California 91711
(480) 246-4248

Environmental and Natural
Resource Regulatory Compliance

Facility Planning, Engineering
& Infrastructure Management

Geographic Information
System Consulting

www.vernadero.com

30 November 2010

Ms. Debbie Pilas-Treadway
California Native American Heritage Commission
915 Capitol Mall, Room 364
Sacramento, California 95814

RE: Environmental Assessment – Stationing a Black Hawk Helicopter
Company at Joint Forces Training Base Los Alamitos, California

Dear Ms. Pilas-Treadway,
Vernadero Group Incorporated, on behalf of the United States Army
Reserve (USAR), is preparing an Environmental Assessment (EA) to
analyze the potential environmental effects of stationing a Black Hawk
Company at Joint Forces Training Base Los Alamitos, Orange
County, California. A regional location map and site map are attached.

The Proposed Action, which is the Army's preferred alternative,
involves stationing a 66-member Aviation Company at JFTB Los
Alamitos. The Company includes A Company 2-238th AVN Regiment
and Detachment 1 from D and E Companies. Its wartime mission is to
provide aerial Command and Control support, limited air assault, and
air movement for the corps and higher level commands. The
Company consists of 15 full-time personnel and 51 part-time Reserve
Soldiers and includes eight HH-60 Black Hawk helicopters, three High
Mobility Multipurpose Wheeled Vehicles (HMMWV), two Heavy
Expanded Mobility Tactical Trucks (HEMTT), one flatbed trailer, and
two fuel trailers.

The Company will be collocated with other USAR units in existing
hangar space at JFTB Los Alamitos. The Company would perform
light helicopter maintenance and conduct flight training operations
including departure and landing exercises. The helicopters would
utilize airspace and follow flight patterns already being used by fixed-
wing and rotary-wing aircraft that train at the Installation.

During the course of this EA, detailed investigations will be
undertaken to identify potential environmental impacts related to the
improvements being considered. These impacts will be documented
in the EA as required by the National Environmental Policy Act
(NEPA). In addition to meeting the requirements of NEPA, compliance
with other relevant environmental regulations (Section 7 of the

Endangered Species Act, Section 106 of the National Historic Preservation Act, etc.) will be accomplished during this EA.

As part of the early coordination and NEPA scoping process, we are identifying key issues that will need to be addressed by this study. Please provide any pertinent information that your office maintains for Orange County, as well as a current list of Native American contacts for the project area. Any preliminary data your office can provide will be evaluated and incorporated into the EA.

In order to sufficiently address key project issues while maintaining the project schedule, we are requesting you provide a written response to this letter within 30 days of receipt.

Please send your responses to:

Ms. Sara Jackson
Vernadero Group Incorporated
PO Box 121143
West Melbourne, FL 32912

Please feel free to contact me at (321) 725-0667 or by e-mail at sjackson@vernadero.com should you have any questions or concerns. We look forward to working cooperatively with you to make this important project successful for all parties involved.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Sara M. Jackson', with a long horizontal flourish extending to the right.

Sara Jackson, REM
Environmental Program Manager



**VERNADERO
GROUP**
INCORPORATED

CONSULTING PLANNERS,
SCIENTISTS & ENGINEERS
SPECIALIZING IN THE US ARMY
ENVIRONMENTAL PROGRAM

Corresponding Office:

Southeast Region
P.O. Box 121143
West Melbourne, Florida 32912
(321) 725-0667

Corporate Office:

Phoenix, Arizona
4422 East Indian School Road
Suite 101
Phoenix, Arizona 85018
(480) 315-1000
(480) 315-1001 fax

Regional Project Offices:

Fort Huachuca, Arizona
500 North Garden Avenue
Suite S1A-109
Sierra Vista, Arizona 85635
(520) 459-2108

East Region
P.O. Box 433
Ladysmith, Virginia 22501
(804) 448-8305

South Region
P.O. Box 296
140 Sheffield Lane
Mount Ida, Arkansas 71957
(501) 276-1472

West Region
P.O. Box 1321
Claremont, California 91711
(480) 246-4248

Environmental and Natural
Resource Regulatory Compliance

Facility Planning, Engineering
& Infrastructure Management

Geographic Information
System Consulting

www.vernadero.com

30 November 2010

Ed Eckerle
Program Supervisor
Planning, Rule Development, and Area Sources
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, California 91765

RE: Environmental Assessment – Stationing a Black Hawk Helicopter
Company at Joint Forces Training Base Los Alamitos, California

Dear Mr. Eckerle,
Vernadero Group Incorporated, on behalf of the United States Army
Reserve (USAR), is preparing an Environmental Assessment (EA) to
analyze the potential environmental effects of stationing a Black Hawk
Company at Joint Forces Training Base Los Alamitos, Orange
County, California. A regional location map and site map are attached.

The Proposed Action, which is the Army's preferred alternative,
involves stationing a 66-member Aviation Company at JFTB Los
Alamitos. The Company includes A Company 2-238th AVN Regiment
and Detachment 1 from D and E Companies. Its wartime mission is to
provide aerial Command and Control support, limited air assault, and
air movement for the corps and higher level commands. The
Company consists of 15 full-time personnel and 51 part-time Reserve
Soldiers and includes eight HH-60 Black Hawk helicopters, three High
Mobility Multipurpose Wheeled Vehicles (HMMWV), two Heavy
Expanded Mobility Tactical Trucks (HEMTT), one flatbed trailer, and
two fuel trailers.

The Company will be collocated with other USAR units in existing
hangar space at JFTB Los Alamitos. The Company would perform
light helicopter maintenance and conduct flight training operations
including departure and landing exercises. The helicopters would
utilize airspace and follow flight patterns already being used by fixed-
wing and rotary-wing aircraft that train at the Installation.

During the course of this EA, detailed investigations will be
undertaken to identify potential environmental impacts related to the
improvements being considered. These impacts will be documented
in the EA as required by the National Environmental Policy Act

(NEPA). In addition to meeting the requirements of NEPA, compliance with other relevant environmental regulations (Section 7 of the Endangered Species Act, Section 106 of the National Historic Preservation Act, etc.) will be accomplished during this EA.

As part of the early coordination and NEPA scoping process, we are identifying key issues that will need to be addressed by this study. Please provide comments relative to specific issues or geographic areas of concern your office may have, based on your expertise or regulatory jurisdiction. Any preliminary data your office can provide will be evaluated and incorporated into the EA.

In order to sufficiently address key project issues while maintaining the project schedule, we are requesting you provide a written response to this letter within 30 days of receipt.

Please send your responses to:

Ms. Sara Jackson
Vernadero Group Incorporated
PO Box 121143
West Melbourne, FL 32912

Please feel free to contact me at (321) 725-0667 or by e-mail at sjackson@vernadero.com should you have any questions or concerns. We look forward to working cooperatively with you to make this important project successful for all parties involved.

Sincerely,

A handwritten signature in dark ink, appearing to read "Sara M. Jackson", with a long horizontal flourish extending to the right.

Sara Jackson, REM
Environmental Program Manager



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

December 15, 2010

Sara Jackson
Vernadero Group Incorporated
PO Box 121143
West Melbourne, FL 32912

Notice of Preparation of a CEQA Document for the Black Hawk Helicopter Company at Joint Forces Training Base Project

The South Coast Air Quality Management District (SCAQMD) appreciates the opportunity to comment on the above-mentioned document. The SCAQMD's comments are recommendations regarding the analysis of potential air quality impacts from the proposed project that should be included in the draft environmental assessment (EA). Please send the SCAQMD a copy of the Draft EA upon its completion. Note that copies of the Draft EA that are submitted to the State Clearinghouse are not forwarded to the SCAQMD. Please forward a copy of the Draft EA directly to SCAQMD at the address in our letterhead. **In addition, please send with the draft EA all appendices or technical documents related to the air quality and greenhouse gas analyses and electronic versions of all air quality modeling and health risk assessment files. These include original emission calculation spreadsheets and modeling files (not Adobe PDF files). Without all files and supporting air quality documentation, the SCAQMD will be unable to complete its review of the air quality analysis in a timely manner. Any delays in providing all supporting air quality documentation will require additional time for review beyond the end of the comment period.**

Air Quality Analysis

The SCAQMD adopted its California Environmental Quality Act (CEQA) Air Quality Handbook in 1993 to assist other public agencies with the preparation of air quality analyses. The SCAQMD recommends that the Lead Agency use this Handbook as guidance when preparing its air quality analysis. Copies of the Handbook are available from the SCAQMD's Subscription Services Department by calling (909) 396-3720. Alternatively, the lead agency may wish to consider using the California Air Resources Board (CARB) approved URBEMIS 2007 Model. This model is available on the SCAQMD Website at: www.urbemis.com.

The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the project and all air pollutant sources related to the project. Air quality impacts from both construction (including demolition, if any) and operations should be calculated. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, that is, sources that generate or attract vehicular trips should be included in the analysis.

The SCAQMD has developed a methodology for calculating PM_{2.5} emissions from construction and operational activities and processes. In connection with developing PM_{2.5} calculation methodologies, the SCAQMD has also developed both regional and localized significance thresholds. The SCAQMD requests that the lead agency quantify PM_{2.5} emissions and compare the results to the recommended PM_{2.5} significance thresholds. Guidance for calculating PM_{2.5} emissions and PM_{2.5} significance thresholds can be found at the following internet address: http://www.aqmd.gov/ceqa/handbook/PM2_5/PM2_5.html.

In addition to analyzing regional air quality impacts the SCAQMD recommends calculating localized air quality impacts and comparing the results to localized significance thresholds (LSTs). LST's can be used in addition to the

recommended regional significance thresholds as a second indication of air quality impacts when preparing a CEQA document. Therefore, when preparing the air quality analysis for the proposed project, it is recommended that the lead agency perform a localized significance analysis by either using the LSTs developed by the SCAQMD or performing dispersion modeling as necessary. Guidance for performing a localized air quality analysis can be found at <http://www.aqmd.gov/ceqa/handbook/LST/LST.html>.

In the event that the proposed project generates or attracts vehicular trips, especially heavy-duty diesel-fueled vehicles, it is recommended that the lead agency perform a mobile source health risk assessment. Guidance for performing a mobile source health risk assessment ("Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis") can be found on the SCAQMD's CEQA web pages at the following internet address: http://www.aqmd.gov/ceqa/handbook/mobile_toxic/mobile_toxic.html. An analysis of all toxic air contaminant impacts due to the decommissioning or use of equipment potentially generating such air pollutants should also be included.

Mitigation Measures

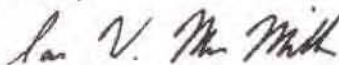
In the event that the project generates significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized during project construction and operation to minimize or eliminate significant adverse air quality impacts. To assist the Lead Agency with identifying possible mitigation measures for the project, please refer to Chapter 11 of the SCAQMD CEQA Air Quality Handbook for sample air quality mitigation measures. Additional mitigation measures can be found on the SCAQMD's CEQA web pages at the following internet address: www.aqmd.gov/ceqa/handbook/mitigation/MM_intro.html. Additionally, SCAQMD's Rule 403 – Fugitive Dust, and the Implementation Handbook contain numerous measures for controlling construction-related emissions that should be considered for use as CEQA mitigation if not otherwise required. Other measures to reduce air quality impacts from land use projects can be found in the SCAQMD's Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. This document can be found at the following internet address: <http://www.aqmd.gov/prdas/aqguide/aqguide.html>. In addition, guidance on siting incompatible land uses can be found in the California Air Resources Board's Air Quality and Land Use Handbook: A Community Perspective, which can be found at the following internet address: <http://www.arb.ca.gov/ch/handbook.pdf>. CARB's Land Use Handbook is a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process. Pursuant to state CEQA Guidelines §15126.4 (a)(1)(D), any impacts resulting from mitigation measures must also be discussed.

Data Sources

SCAQMD rules and relevant air quality reports and data are available by calling the SCAQMD's Public Information Center at (909) 396-2039. Much of the information available through the Public Information Center is also available via the SCAQMD's World Wide Web Homepage (<http://www.aqmd.gov>).

The SCAQMD is willing to work with the Lead Agency to ensure that project-related emissions are accurately identified, categorized, and evaluated. If you have any questions regarding this letter, please call Ian MacMillan, Program Supervisor, CEQA Section, at (909) 396-3244.

Sincerely,



Ian MacMillan

Program Supervisor, CEQA Inter-Governmental Review
Planning, Rule Development & Area Sources

IM

LAC101207-03

Control Number



**VERNADERO
GROUP**
INCORPORATED

CONSULTING PLANNERS,
SCIENTISTS & ENGINEERS
SPECIALIZING IN THE US ARMY
ENVIRONMENTAL PROGRAM

Corresponding Office:

Southeast Region
P.O. Box 121143
West Melbourne, Florida 32912
(321) 725-0667

Corporate Office:

Phoenix, Arizona
4422 East Indian School Road
Suite 101
Phoenix, Arizona 85018
(480) 315-1000
(480) 315-1001 fax

Regional Project Offices:

Fort Huachuca, Arizona
500 North Garden Avenue
Suite S1A-109
Sierra Vista, Arizona 85635
(520) 459-2108

East Region
P.O. Box 433
Ladysmith, Virginia 22501
(804) 448-8305

South Region
P.O. Box 296
140 Sheffield Lane
Mount Ida, Arkansas 71957
(501) 276-1472

West Region
P.O. Box 1321
Claremont, California 91711
(480) 246-4248

Environmental and Natural
Resource Regulatory Compliance

Facility Planning, Engineering
& Infrastructure Management

Geographic Information
System Consulting

www.vernadero.com

30 November 2010

Jill Terp
Division Chief
Carlsbad Fish and Wildlife Office
610 Hidden Valley Road
Carlsbad, California 92011

RE: Environmental Assessment – Stationing a Black Hawk Helicopter
Company at Joint Forces Training Base Los Alamitos, California

Dear Ms. Terp,
Vernadero Group Incorporated, on behalf of the United States Army
Reserve (USAR), is preparing an Environmental Assessment (EA) to
analyze the potential environmental effects of stationing a Black Hawk
Company at Joint Forces Training Base Los Alamitos, Orange
County, California. A regional location map and site map are attached.

The Proposed Action, which is the Army's preferred alternative,
involves stationing a 66-member Aviation Company at JFTB Los
Alamitos. The Company includes A Company 2-238th AVN Regiment
and Detachment 1 from D and E Companies. Its wartime mission is to
provide aerial Command and Control support, limited air assault, and
air movement for the corps and higher level commands. The
Company consists of 15 full-time personnel and 51 part-time Reserve
Soldiers and includes eight HH-60 Black Hawk helicopters, three High
Mobility Multipurpose Wheeled Vehicles (HMMWV), two Heavy
Expanded Mobility Tactical Trucks (HEMTT), one flatbed trailer, and
two fuel trailers.

The Company will be collocated with other USAR units in existing
hangar space at JFTB Los Alamitos. The Company would perform
light helicopter maintenance and conduct flight training operations
including departure and landing exercises. The helicopters would
utilize airspace and follow flight patterns already being used by fixed-
wing and rotary-wing aircraft that train at the Installation.

During the course of this EA, detailed investigations will be
undertaken to identify potential environmental impacts related to the
improvements being considered. These impacts will be documented
in the EA as required by the National Environmental Policy Act
(NEPA). In addition to meeting the requirements of NEPA, compliance
with other relevant environmental regulations (Section 7 of the

Endangered Species Act, Section 106 of the National Historic Preservation Act, etc.) will be accomplished during this EA.

As part of the early coordination and NEPA scoping process, we are identifying key issues that will need to be addressed by this study. Please provide a current list of federally threatened, endangered, and candidate species, as well as information on any nearby areas designated as critical habitat. Any preliminary data your office can provide will be evaluated and incorporated into the EA.

In order to sufficiently address key project issues while maintaining the project schedule, we are requesting you provide a written response to this letter within 30 days of receipt.

Please send your responses to:

Ms. Sara Jackson
Vernadero Group Incorporated
PO Box 121143
West Melbourne, FL 32912

Please feel free to contact me at (321) 725-0667 or by e-mail at sjackson@vernadero.com should you have any questions or concerns. We look forward to working cooperatively with you to make this important project successful for all parties involved.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Sara M Jackson', with a long horizontal flourish extending to the right.

Sara Jackson, REM
Environmental Program Manager



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
Carlsbad Fish and Wildlife Office
6010 Hidden Valley Road, Suite 101
Carlsbad, California 92011



In Reply Refer To:
FWS-OR-11B0099-11SL0155

DEC 21 2010

Ms. Sara Jackson
Environmental Program Manager
Vernadero Group Incorporated
P.O. Box 121143
West Melbourne, Florida 32912

Subject: Request for Species List for the Proposed Stationing of a Black Hawk Helicopter Company at Joint Forces Training Base, Los Alamitos, California

Dear Ms. Jackson:

This letter is in response to your request, received December 6, 2010, for a list of federally endangered, threatened, and proposed species potentially present in the vicinity of the above referenced project. To assist you in evaluating the potential occurrence of federally listed endangered, threatened, proposed, and candidate species and their critical habitat that may occur in the vicinity of the area identified, we are providing the enclosed list.

The primary mission of the U.S. Fish and Wildlife Service (Service) is to "work with others to conserve, protect, and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people." Specifically, the Service administers the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*), and provides support to other Federal agencies in accordance with the provisions of the Fish and Wildlife Coordination Act. Section 9 of the Act prohibits the "take" (e.g., harm, harassment, pursuit, injury, kill) of federally listed wildlife. Take incidental to otherwise lawful activities can be permitted under the provisions of section 7 (Federal consultations) and section 10 (private permits) of the Act.

We do not have on-the-ground site-specific information for this area. Therefore, we recommend that an assessment of the actual potential for direct, indirect, and cumulative impacts likely to result from the proposed study be conducted by a biologist directly familiar with the habitat conditions and associated species in and around the study area.

Please contact the California Department of Fish and Game for State-listed and other sensitive species that may occur in the area of the project. State-listed species are protected under the provisions of the California Endangered Species Act. Rare plant species that may occur in the project area are included in the California Native Plant Society's (CNPS) inventory of rare and

TAKE PRIDE
IN AMERICA

Ms. Sara Jackson FWS-OR-11B099-11SL0155

2

endangered vascular plants in California. State-listed and CNPS species require full consideration under the California Environmental Quality Act.

Should you have any questions regarding the species list provided, or your responsibilities under the Act, please contact Fish and Wildlife Biologist Katy Kughen of my staff at (760) 431-9440, extension 201.

Sincerely,

A handwritten signature in cursive script, appearing to read "Jonathan Snyder".

for Karen A. Goebel
Assistant Field Supervisor

Enclosure

**Federally Endangered, Threatened, Proposed, and Candidate Species that May Occur in the
Vicinity of Orange County, California**

December 15, 2010

Common Name	Scientific Name	Federal Statusⁱ
<u>Birds</u>		
western snowy plover	<i>Charadrius alexandrinus nivosus</i>	threatened, CH
yellow-billed cuckoo	<i>Coccyzus americanus</i>	candidate
southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	endangered, CH
short-tailed albatross	<i>Phoebastria albatrus</i>	endangered
coastal California gnatcatcher	<i>Polioptila californica californica</i>	threatened, CH
light-footed clapper rail	<i>Rallus longirostris levipes</i>	endangered
California least tern	<i>Sternula antillarum browni</i>	endangered
least Bell's vireo	<i>Vireo bellii pusillus</i>	endangered, CH
<u>Fish</u>		
Santa Ana sucker	<i>Catostomus santaanae</i>	threatened, CH
tidewater goby	<i>Eucyclogobius newberryi</i>	endangered, CH
southern steelhead	<i>Oncorhynchus mykiss</i>	endangered
<u>Amphibians</u>		
arroyo toad	<i>Bufo californicus</i>	endangered, CH
California red-legged frog	<i>Rana aurora draytoni</i>	threatened, CH
<u>Plants</u>		
Braunton's milk-vetch	<i>Astragalus brauntonii</i>	endangered, CH
Ventura marsh milk-vetch	<i>Astragalus pycnostachyus</i> var. <i>lanosissimu</i>	endangered, CH
thread-leaved brodiaea	<i>Brodiaea filifolia</i>	threatened, CH
San Fernando Valley spineflower	<i>Chorizanthe parryi</i> var. <i>fernandina</i>	candidate
salt marsh bird's beak	<i>Cordylanthus maritima</i> subsp. <i>maritimus</i>	endangered
Santa Monica Mountains dudleya	<i>Dudleya cymosa</i> subsp. <i>ovatifolia</i>	threatened

**Federally Endangered, Threatened, Proposed, and Candidate Species that May Occur in the
Vicinity of Orange County, California**

December 15, 2010

Common Name	Scientific Name	Federal Status¹
Laguna Beach live-forever	<i>Dudleya stolonifera</i>	threatened
Santa Ana River woolly-star	<i>Eriastrum densifolium</i> subsp. <i>sanctorum</i>	endangered
Gambel's watercress	<i>Rorippa gambellii</i>	endangered
big-leaved crown beard	<i>Verbesina dissita</i>	threatened
<u>Invertebrates</u>		
San Diego fairy shrimp	<i>Branchinecta sandiegonensis</i>	endangered, CH
Quino checkerspot butterfly	<i>Euphydryas editha quino</i>	endangered, PCH
Riverside fairy shrimp	<i>Streptocephalus woottoni</i>	endangered, CH
<u>Mammals</u>		
southern sea otter	<i>Enhydra lutris nereis</i>	threatened
Pacific pocket mouse	<i>Perognathus longimembris pacificus</i>	endangered

¹ CH – designated Critical Habitat
PCH – proposed Critical Habitat



VERNADERO GROUP

INCORPORATED

CONSULTING PLANNERS,
SCIENTISTS & ENGINEERS
SPECIALIZING IN THE US ARMY
ENVIRONMENTAL PROGRAM

Corresponding Office:

Southeast Region
P.O. Box 121143
West Melbourne, Florida 32912
(321) 725-0667

Corporate Office:

Phoenix, Arizona
4422 East Indian School Road
Suite 101
Phoenix, Arizona 85018
(480) 315-1000
(480) 315-1001 fax

Regional Project Offices:

Fort Huachuca, Arizona
500 North Garden Avenue
Suite S1A-109
Sierra Vista, Arizona 85635
(520) 459-2108

East Region
P.O. Box 433
Ladysmith, Virginia 22501
(804) 448-8305

South Region
P.O. Box 296
140 Sheffield Lane
Mount Ida, Arkansas 71957
(501) 276-1472

West Region
P.O. Box 1321
Claremont, California 91711
(480) 246-4248

Environmental and Natural
Resource Regulatory Compliance

Facility Planning, Engineering
& Infrastructure Management

Geographic Information
System Consulting

www.vernadero.com

30 November 2010

Matthew Fertal
City Manager
City of Garden Grove
11222 Acacia Parkway
Garden Grove, CA 92840

RE: Environmental Assessment – Stationing a Black Hawk Helicopter
Company at Joint Forces Training Base Los Alamitos, California

Dear Mr. Fertal,

Vernadero Group Incorporated, on behalf of the United States Army Reserve (USAR), is preparing an Environmental Assessment (EA) to analyze the potential environmental effects of stationing a Black Hawk Company at Joint Forces Training Base Los Alamitos, Orange County, California. A regional location map and site map are attached.

The Proposed Action, which is the Army's preferred alternative, involves stationing a 66 -member Aviation Company at JFTB Los Alamitos. The Company includes A Company 2-238th AVN Regiment and Detachment 1 from D and E Companies. Its wartime mission is to provide aerial Command and Control support, limited air assault, and air movement for the corps and higher level commands. The Company consists of 15 full-time personnel and 51 part-time Reserve Soldiers and includes eight HH-60 Black Hawk helicopters, three High Mobility Multipurpose Wheeled Vehicles (HMMWV), two Heavy Expanded Mobility Tactical Trucks (HEMTT), one flatbed trailer, and two fuel trailers.

The Company will be collocated with other USAR units in existing hangar space at JFTB Los Alamitos. The Company would perform light helicopter maintenance and conduct flight training operations including departure and landing exercises. The helicopters would utilize airspace and follow flight patterns already being used by fixed-wing and rotary-wing aircraft that train at the Installation.

During the course of this EA, detailed investigations will be undertaken to identify potential environmental impacts related to the improvements being considered. These impacts will be documented in the EA as required by the National Environmental Policy Act (NEPA). In addition to

meeting the requirements of NEPA, compliance with other relevant environmental regulations (Section 7 of the Endangered Species Act, Section 106 of the National Historic Preservation Act, etc.) will be accomplished during this EA.

As part of the early coordination and NEPA scoping process, we are identifying key issues that will need to be addressed by this study. Please provide comments relative to specific issues or geographic areas of concern your office may have, based on your expertise or regulatory jurisdiction. Any preliminary data your office can provide will be evaluated and incorporated into the EA.

In order to sufficiently address key project issues while maintaining the project schedule, we are requesting you provide a written response to this letter within 30 days of receipt.

Please send your responses to:

Ms. Sara Jackson
Vernadero Group Incorporated
PO Box 121143
West Melbourne, FL 32912

Please feel free to contact me at (321) 725-0667 or by e-mail at sjackson@vernadero.com should you have any questions or concerns. We look forward to working cooperatively with you to make this important project successful for all parties involved.

Sincerely,

A handwritten signature in dark ink, appearing to read "Sara Jackson", followed by a long horizontal flourish.

Sara Jackson, REM
Environmental Program Manager



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
HEADQUARTERS, 63D REGIONAL SUPPORT COMMAND
P.O. BOX 63
MOFFETT FIELD, CA 94035

March 7, 2011

Environmental Branch

Mr. Matthew Fertal
City Manager
City of Garden Grove
11222 Acacia Parkway
Garden Grove, CA 92840

Dear Mr. Fertal:

You are cordially invited to attend an Open House hosted by the United States Army Reserve (USAR) to inform the public of a proposed stationing action that includes the transfer of an 87-member Aviation Company from Aviation Support Facility Victorville, California to the Joint Forces Training Base (JFTB) Los Alamitos, California. The Open House will be held at the Veteran's Hall located at JFTB Los Alamitos on March 16, 2011 from 7:00pm – 8:00pm.

The Open House will allow members of the public an opportunity to learn more about the Proposed Action. The meeting will also provide details regarding the upcoming 30-day public review period for the Environmental Assessment (EA). The EA analyzes the potential environmental impacts associated with the Proposed Action.

The Proposed Action involves stationing an 87-member Aviation Company at JFTB Los Alamitos. The Company consists of 29 full-time personnel and 58 part-time Reserve Soldiers and includes 8 UH-60 Black Hawk helicopters, 2 High Mobility Multipurpose Wheeled Vehicles (HMMWV), 3 Heavy Expanded Mobility Tactical Trucks (HEMTT), 1 flatbed trailer, and 3 fuel trailers.

The Company will be collocated with other USAR units in existing hangar space at JFTB Los Alamitos. The Company would perform light helicopter maintenance and conduct flight training operations including departure and landing exercises. The helicopters would utilize airspace and follow flight patterns already being used by fixed-wing and rotary-wing aircraft that train at the Installation.

If you have any questions about the upcoming meeting, please contact Ms. Carmen Call at (650) 279-1823 or by email at carmen.call@us.army.mil.

Sincerely,

A handwritten signature in black ink, appearing to read "Laura M. Caballero", is written over a large, stylized, light-colored signature that is already present on the document.

LAURA M. CABALLERO
Chief, Environmental Branch
Directorate of Public Works

You're Invited



Open House to Discuss Stationing an Army Reserve Blackhawk Helicopter Company at Joint Forces Training Base (JFTB) Los Alamitos, California



The topic will be the relocation of an 87-member Army Reserve Aviation Company from Aviation Support Facility (ASF) Victorville, CA to Joint Forces Training Base (JFTB) Los Alamitos, CA.

The move consists of 29 full-time personnel and 58 part-time Reserve Soldiers and includes 8 UH-60 Black Hawk helicopters, 2 HMMWVs, 3 HEMTTs, 1 flatbed trailer, and 3 fuel trailers.

An Environmental Assessment (EA) was prepared to evaluate the potential for environmental impacts associated with the Proposed Action. The EA analyzed potential impacts to 11 resource areas, which are open for discussion at the meeting.

Representatives of JFTB Los Alamitos and the U.S. Army Reserve 63d Regional Support Command will be on hand to explain the relocation and answer your questions.

Thursday

March 16, 2011

7:00 – 8:00 P.M.

**Veteran's Service Center - Building 244
JFTB Los Alamitos**



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
HEADQUARTERS, 63D REGIONAL SUPPORT COMMAND
P.O. BOX 63
MOFFETT FIELD, CA 94035

March 7, 2011

Environmental Branch

Mr. Patrick H. West
City Manager
City of Long Beach
333 West Ocean Boulevard, 14th Floor
Long Beach, California 90802

Dear Mr. West:

You are cordially invited to attend an Open House hosted by the United States Army Reserve (USAR) to inform the public of a proposed stationing action that includes the transfer of an 87-member Aviation Company from Aviation Support Facility Victorville, California to the Joint Forces Training Base (JFTB) Los Alamitos, California. The Open House will be held at the Veteran's Hall located at JFTB Los Alamitos on March 16, 2011 from 7:00pm – 8:00pm.

The Open House will allow members of the public an opportunity to learn more about the Proposed Action. The meeting will also provide details regarding the upcoming 30-day public review period for the Environmental Assessment (EA). The EA analyzes the potential environmental impacts associated with the Proposed Action.

The Proposed Action involves stationing an 87-member Aviation Company at JFTB Los Alamitos. The Company consists of 29 full-time personnel and 58 part-time Reserve Soldiers and includes 8 UH-60 Black Hawk helicopters, 2 High Mobility Multipurpose Wheeled Vehicles (HMMWV), 3 Heavy Expanded Mobility Tactical Trucks (HEMTT), 1 flatbed trailer, and 3 fuel trailers.

The Company will be collocated with other USAR units in existing hangar space at JFTB Los Alamitos. The Company would perform light helicopter maintenance and conduct flight training operations including departure and landing exercises. The helicopters would utilize airspace and follow flight patterns already being used by fixed-wing and rotary-wing aircraft that train at the Installation.

If you have any questions about the upcoming meeting, please contact Ms. Carmen Call at (650) 279-1823 or by email at carmen.call@us.army.mil.

Sincerely,

LAURA M. CABALLERO
Chief, Environmental Branch
Directorate of Public Works



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
HEADQUARTERS, 63D REGIONAL SUPPORT COMMAND
P.O. BOX 63
MOFFETT FIELD, CA 94035

March 7, 2011

Environmental Branch

Mr. Jeffrey L. Stewart
City Manager
City of Los Alamitos
3191 Katella Avenue
Los Alamitos, California 90720

Dear Mr. Stewart:

You are cordially invited to attend an Open House hosted by the United States Army Reserve (USAR) to inform the public of a proposed stationing action that includes the transfer of an 87-member Aviation Company from Aviation Support Facility Victorville, California to the Joint Forces Training Base (JFTB) Los Alamitos, California. The Open House will be held at the Veteran's Hall located at JFTB Los Alamitos on March 16, 2011 from 7:00pm – 8:00pm.

The Open House will allow members of the public an opportunity to learn more about the Proposed Action. The meeting will also provide details regarding the upcoming 30-day public review period for the Environmental Assessment (EA). The EA analyzes the potential environmental impacts associated with the Proposed Action.

The Proposed Action involves stationing an 87-member Aviation Company at JFTB Los Alamitos. The Company consists of 29 full-time personnel and 58 part-time Reserve Soldiers and includes 8 UH-60 Black Hawk helicopters, 2 High Mobility Multipurpose Wheeled Vehicles (HMMWV), 3 Heavy Expanded Mobility Tactical Trucks (HEMTT), 1 flatbed trailer, and 3 fuel trailers.

The Company will be collocated with other USAR units in existing hangar space at JFTB Los Alamitos. The Company would perform light helicopter maintenance and conduct flight training operations including departure and landing exercises. The helicopters would utilize airspace and follow flight patterns already being used by fixed-wing and rotary-wing aircraft that train at the Installation.

If you have any questions about the upcoming meeting, please contact Ms. Carmen Call at (650) 279-1823 or by email at carmen.call@us.army.mil.

Sincerely,

A handwritten signature in black ink, appearing to read "Laura M. Caballero", is written over a horizontal line.

LAURA M. CABALLERO
Chief, Environmental Branch
Directorate of Public Works



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
HEADQUARTERS, 63D REGIONAL SUPPORT COMMAND
P.O. BOX 63
MOFFETT FIELD, CA 94035

March 7, 2011

Environmental Branch

Mr. Dave Carmany
City Manager
City of Seal Beach
211 8th Street
Seal Beach, CA 90740

Dear Mr. Carmany:

You are cordially invited to attend an Open House hosted by the United States Army Reserve (USAR) to inform the public of a proposed stationing action that includes the transfer of an 87-member Aviation Company from Aviation Support Facility Victorville, California to the Joint Forces Training Base (JFTB) Los Alamitos, California. The Open House will be held at the Veteran's Hall located at JFTB Los Alamitos on March 16, 2011 from 7:00pm – 8:00pm.

The Open House will allow members of the public an opportunity to learn more about the Proposed Action. The meeting will also provide details regarding the upcoming 30-day public review period for the Environmental Assessment (EA). The EA analyzes the potential environmental impacts associated with the Proposed Action.

The Proposed Action involves stationing an 87-member Aviation Company at JFTB Los Alamitos. The Company consists of 29 full-time personnel and 58 part-time Reserve Soldiers and includes 8 UH-60 Black Hawk helicopters, 2 High Mobility Multipurpose Wheeled Vehicles (HMMWV), 3 Heavy Expanded Mobility Tactical Trucks (HEMTT), 1 flatbed trailer, and 3 fuel trailers.

The Company will be collocated with other USAR units in existing hangar space at JFTB Los Alamitos. The Company would perform light helicopter maintenance and conduct flight training operations including departure and landing exercises. The helicopters would utilize airspace and follow flight patterns already being used by fixed-wing and rotary-wing aircraft that train at the Installation.

If you have any questions about the upcoming meeting, please contact Ms. Carmen Call at (650) 279-1823 or by email at carmen.call@us.army.mil.

Sincerely,

A handwritten signature in black ink, appearing to read "Laura M. Caballero", is written over a large, faint, circular official stamp.

LAURA M. CABALLERO
Chief, Environmental Branch
Directorate of Public Works



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
HEADQUARTERS, 63D REGIONAL SUPPORT COMMAND
P.O. BOX 63
MOFFETT FIELD, CA 94035

March 7, 2011

Environmental Branch

Mr. Donald D. Lamm
City Manager
City of Westminster
8200 Civic Center
Westminster, CA 92683

Dear Mr. Lamm:

You are cordially invited to attend an Open House hosted by the United States Army Reserve (USAR) to inform the public of a proposed stationing action that includes the transfer of an 87-member Aviation Company from Aviation Support Facility Victorville, California to the Joint Forces Training Base (JFTB) Los Alamitos, California. The Open House will be held at the Veteran's Hall located at JFTB Los Alamitos on March 16, 2011 from 7:00pm – 8:00pm.

The Open House will allow members of the public an opportunity to learn more about the Proposed Action. The meeting will also provide details regarding the upcoming 30-day public review period for the Environmental Assessment (EA). The EA analyzes the potential environmental impacts associated with the Proposed Action.

The Proposed Action involves stationing an 87-member Aviation Company at JFTB Los Alamitos. The Company consists of 29 full-time personnel and 58 part-time Reserve Soldiers and includes 8 UH-60 Black Hawk helicopters, 2 High Mobility Multipurpose Wheeled Vehicles (HMMWV), 3 Heavy Expanded Mobility Tactical Trucks (HEMTT), 1 flatbed trailer, and 3 fuel trailers.

The Company will be collocated with other USAR units in existing hangar space at JFTB Los Alamitos. The Company would perform light helicopter maintenance and conduct flight training operations including departure and landing exercises. The helicopters would utilize airspace and follow flight patterns already being used by fixed-wing and rotary-wing aircraft that train at the Installation.

If you have any questions about the upcoming meeting, please contact Ms. Carmen Call at (650) 279-1823 or by email at carmen.call@us.army.mil.

Sincerely,

A handwritten signature in black ink, appearing to read "Laura M. Caballero", is written over a large, stylized, light-colored circular mark.

LAURA M. CABALLERO
Chief, Environmental Branch
Directorate of Public Works



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
HEADQUARTERS, 63D REGIONAL SUPPORT COMMAND
P.O. BOX 63
MOFFETT FIELD, CA 94035

March 7, 2011

Environmental Branch

Mr. John Bahorski
City Manager
City of Cypress
5275 Orange Avenue
Cypress, CA 90630

Dear Mr. Bahorski:

You are cordially invited to attend an Open House hosted by the United States Army Reserve (USAR) to inform the public of a proposed stationing action that includes the transfer of an 87-member Aviation Company from Aviation Support Facility Victorville, California to the Joint Forces Training Base (JFTB) Los Alamitos, California. The Open House will be held at the Veteran's Hall located at JFTB Los Alamitos on March 16, 2011 from 7:00pm – 8:00pm.

The Open House will allow members of the public an opportunity to learn more about the Proposed Action. The meeting will also provide details regarding the upcoming 30-day public review period for the Environmental Assessment (EA). The EA analyzes the potential environmental impacts associated with the Proposed Action.

The Proposed Action involves stationing an 87-member Aviation Company at JFTB Los Alamitos. The Company consists of 29 full-time personnel and 58 part-time Reserve Soldiers and includes 8 UH-60 Black Hawk helicopters, 2 High Mobility Multipurpose Wheeled Vehicles (HMMWV), 3 Heavy Expanded Mobility Tactical Trucks (HEMTT), 1 flatbed trailer, and 3 fuel trailers.

The Company will be collocated with other USAR units in existing hangar space at JFTB Los Alamitos. The Company would perform light helicopter maintenance and conduct flight training operations including departure and landing exercises. The helicopters would utilize airspace and follow flight patterns already being used by fixed-wing and rotary-wing aircraft that train at the Installation.

If you have any questions about the upcoming meeting, please contact Ms. Carmen Call at (650) 279-1823 or by email at carmen.call@us.army.mil.

Sincerely,

LAURA M. CABALLERO
Chief, Environmental Branch
Directorate of Public Works



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
HEADQUARTERS, 63D REGIONAL SUPPORT COMMAND
P.O. BOX 63
MOFFETT FIELD, CA 94035

March 7, 2011

Environmental Branch

Mr. Joe Colombo
Community Development Director
City of Hawaiian Gardens
21815 Pioneer Boulevard
Hawaiian Gardens, CA 90716

Dear Mr. Colombo:

You are cordially invited to attend an Open House hosted by the United States Army Reserve (USAR) to inform the public of a proposed stationing action that includes the transfer of an 87-member Aviation Company from Aviation Support Facility Victorville, California to the Joint Forces Training Base (JFTB) Los Alamitos, California. The Open House will be held at the Veteran's Hall located at JFTB Los Alamitos on March 16, 2011 from 7:00pm – 8:00pm.

The Open House will allow members of the public an opportunity to learn more about the Proposed Action. The meeting will also provide details regarding the upcoming 30-day public review period for the Environmental Assessment (EA). The EA analyzes the potential environmental impacts associated with the Proposed Action.

The Proposed Action involves stationing an 87-member Aviation Company at JFTB Los Alamitos. The Company consists of 29 full-time personnel and 58 part-time Reserve Soldiers and includes 8 UH-60 Black Hawk helicopters, 2 High Mobility Multipurpose Wheeled Vehicles (HMMWV), 3 Heavy Expanded Mobility Tactical Trucks (HEMTT), 1 flatbed trailer, and 3 fuel trailers.

The Company will be collocated with other USAR units in existing hangar space at JFTB Los Alamitos. The Company would perform light helicopter maintenance and conduct flight training operations including departure and landing exercises. The helicopters would utilize airspace and follow flight patterns already being used by fixed-wing and rotary-wing aircraft that train at the Installation.

If you have any questions about the upcoming meeting, please contact Ms. Carmen Call at (650) 279-1823 or by email at carmen.call@us.army.mil.

Sincerely,

A handwritten signature in black ink, appearing to read "Laura M. Caballero", is written over a large, stylized, light-colored circular mark.

LAURA M. CABALLERO
Chief, Environmental Branch
Directorate of Public Works

FORMAT PAGE

APPENDIX C. EQUIPMENT FACT SHEETS

[Open](#)**WEAPON SYSTEMS****ALPHABETICAL LIST**[AIRCRAFT](#) [APACHE LONGBOW](#) [BLACK HAWK](#) [CHINOOK](#) [KIOWA WARRIOR](#)**BLACK HAWK****MISSION**

Provide air assault, general support, aeromedical evacuation, command and control and special operations support to combat and stability and support operations.

ENTERED ARMY SERVICE

1979

DESCRIPTION AND SPECIFICATIONS

The UH 60 Black Hawk is a utility tactical transport helicopter that replaces the UH-1 "Huey". The versatile Black Hawk has enhanced the overall mobility of The Army, due to dramatic improvements in troop capacity and cargo lift capability, and will serve as The Army's utility helicopter in the Objective Force. On the asymmetric battlefield, it provides the commander the agility to get to the fight quicker and to mass effects throughout the battlespace across the full spectrum of conflict. An entire 11-person, fully-equipped infantry squad can be lifted in a single Black Hawk, transported faster than in predecessor systems, in most weather conditions. The Black Hawk can reposition a 105 mm Howitzer, its crew of six, and lift up to 30 rounds of ammunition in a single lift. The aircraft's critical components and systems are armored or redundant, and its airframe is designed to progressively crush on impact to protect the crew and passengers.

**ADDITIONAL MEDIA**

	UH-60A	UH-60L
Max. Gross Weight	20,250 lbs	22,000 lbs, 23,500 (external cargo)
Cruising Speed	139 kt	150kt
Endurance	2.3 hrs	2.1 hrs
External Load	320 nm	306 nm
Max. Gross Weight	8000 lbs	9000 lbs
Internal Load	2640 lbs (or 11 combat-equipped troops)	
Crew	4 (2 pilots; 2 crew chiefs)	
Armament	Two 7.62mm machine guns	

MANUFACTURER

United Technologies (Stratford, CT); General Electric (Lynn, MA)

[A - Z](#) [RSS](#) [Contact Us](#) [Accessibility](#) [Privacy & Security](#) [FOIA](#)

WEAPON SYSTEMS**ALPHABETICAL LIST**

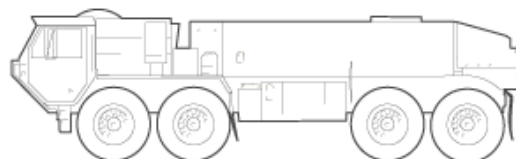
WHEELED VEHICLES FMTV HEMTT HMMWV M1070 PLS STRYKER

HEAVY EXPANDED MOBILITY TACTICAL TRUCK (HEMTT)**MISSION**

Provide transport capabilities for re-supply of combat vehicles and weapons systems.

ENTERED ARMY SERVICE

1982

**ADDITIONAL MEDIA****DESCRIPTION AND SPECIFICATIONS**

There are five basic configurations of the HEMTT series trucks:

M977 cargo truck with Materiel Handling Crane, M978 2500 gallon fuel tanker, M985 cargo truck with Materiel Handling Crane, M983 tractor and the M984 wrecker.

A self-recovery winch is also available on certain models. This vehicle family is rapidly deployable and is designed to operate in any climatic condition where military operations are expected to occur. The HEMTT is the backbone of U.S. Army logistics. Standard features include front and rear tow eyes, blackout lights, 24-volt electrical system, and rear pintle hook for towing trailers and artillery. All models are C130, C141 and C17 air transportable and are capable of fording water crossings up to 48 inches deep.

The HEMTT Load Handling System (LHS) consists of a standard HEMTT (M977/M978 or M985 chassis) prime mover (8 x 8 foot configuration) equipped with an integral load-handing system providing self-load/unload capability and capable of transporting an 11-ton payload. LHS carries equipment/ammunition/supply loads on demountable "flatrack" cargo beds and is able to tow an 11-ton payload trailer also capable of carrying flatracks. The containerized roll-in/out platform (CROP), an A-frame type flatrack that fits inside a 20-foot International Standards Organization container, gives the HEMTT LHS added cargo carrying capability. Flatracks and CROPs are interchangeable between HEMTT LHS and the Palletized Load System.

The FMTV A1 series includes a 1999 Environmental Protection Agency-certified engine, upgraded transmission, electronic data bus, an anti-lock brake system and interactive electronic technical manuals.

DETAILS ON HEAVY EXPANDED MOBILITY TACTICAL TRUCKS

	M977	M978	M985	M983	M984
Length	401 in	401 in	401 in	351 in	392 in
Wheelbase	210 in	210 in	210 in	181 in	191 in
Turning Circle	100 in	100 in	100 in	91 in	95 in
Weight w/out Winch/Crane	37,900 lbs	37,300 lbs	38,700 lbs	32,200 lbs	50,900 lbs
Weight w/ Winch	38,800 lbs	38,200 lbs	39,600		
Weight w/ Crane				39,200 lbs	50,900 lbs
Width	96 in				

Height	Operational 112 in; Transport 102 in
Ground Clearance	Ground 24 in
Max. Speed Cruising Range	Max. Speed 300 mi
Maximum Grade	60% with payload of 22,000 lbs
Engine	445 or 450 horsepower diesel engine
Transmission	4-speed automatic and 2-speed Oshkosh transfer case with air-operated front tandem axle disconnect
Crew	2

MANUFACTURER

Oshkosh Truck (Oshkosh, WI)

[A - Z](#) [RSS](#) [Contact Us](#) [Accessibility](#) [Privacy & Security](#) [FOIA](#)

WEAPON SYSTEMS**ALPHABETICAL LIST**

WHEELED VEHICLES FMTV HEMTT HMMWV M1070 PLS STRYKER

HMMWV (HIGH MOBILITY MULTIPURPOSE WHEELED VEHICLE)**MISSION**

Provide a common light tactical vehicle capability. Replaced the quarter-ton jeep, M718A1 ambulance, half-ton Mule, 1.25-ton Gamma Goat, and M792 ambulance.

ENTERED ARMY SERVICE

1985

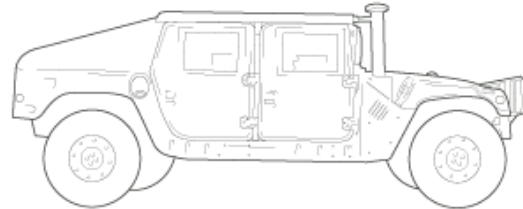
DESCRIPTION AND SPECIFICATIONS

The HMMWV (High-Mobility Multipurpose Wheeled Vehicle) is a light, highly mobile, diesel-powered, four-wheel-drive vehicle equipped with an automatic transmission. Based on the M998 chassis, using common components and kits, the HMMWV can be configured to become a troop carrier, armament carrier, S250 shelter carrier, ambulance, TOW missile carrier, and a Scout vehicle.

The M998 is the baseline vehicle for the M998 series of 1 1/4-ton trucks, which are known as the HMMWV vehicles. The HMMWV vehicles include 11 variants. They are:

- M998 Cargo/Troop Carrier
- M1038 Cargo/Troop Carrier, with winch
- M1043 Armament Carrier
- M1044 Armament Carrier, with winch
- M1045 TOW Carrier
- M1046 TOW Carrier, with winch
- M997 Ambulance, basic armor 4-Litter
- M1035 Ambulance, 2-Litter
- M1037 Shelter Carrier
- M1042 Shelter Carrier, with winch
- M1097 Heavy HMMWV (payload of 4,400 pounds)

All HMMWVs are designed for use over all types of roads, in all weather conditions and are extremely effective in the most difficult terrain. The HMMWV's high power-to-weight ratio, four-wheel drive and high ground clearance combine to give it outstanding cross-country mobility.

LENGTH: 15 ft**WIDTH:** 7.08 ft**HEIGHT:** 6.00 feet reducible to 4.5 feet**WEIGHT:** 5,200 lbs**ENGINE:** V8, 6.2 litre displacement, fuel injected diesel, liquid cooled, compression ignition**HORSEPOWER:** 150 at 3,600 RPM**TRANSMISSION:** 3 speed, automatic**TRANSFER CASE:** 2 speed, locking, chain driven**ELECTRICAL SYSTEM:** 24 volt, negative ground, 60 amps**BRAKES:** Hydraulic, 4-wheeled disc

ADDITIONAL MEDIA



FORDING DEPTH: without preparation: 2.5 ft (76.2 cm); with deep water fording kit : 5 ft (1.5 m)

FUEL TYPE: Diesel

FUEL CAPACITY: 25 gallons

RANGE: 350 mile highway

MAX. SPEED: 65 mph

MANUFACTURER

AM General (South Bend, IN); O'Gara-Hess & Eisenhardt (Fairfield, OH)

[A - Z](#) [RSS](#) [Contact Us](#) [Accessibility](#) [Privacy & Security](#) [FOIA](#)

APPENDIX D. HELICOPTER PROCEDURE GUIDE

Helicopter Procedure Guide
Los Alamitos Army Airfield
Joint Forces Training Base, Los Alamitos, Ca
“Home to the California Army National Guard Aviation”

NOISE ABATEMENT

Los Alamitos Army Airfield (AAF) is located in extreme proximity to several highly concentrated residential areas. Los Alamitos AAF institutes a Noise Abatement Program which incorporates unique traffic patterns and arrival/departure procedures. The program focuses on pilot education and cooperation which also benefits the immediate surrounding residential communities of Los Alamitos, Seal Beach, Garden Grove, and Cypress, by reducing the adverse impact of noise during aviation operations. Helicopter aircrews participating in aviation operations at Los Alamitos AAF are expected to know and adhere to the noise abatement flight procedures. Compliance with flight procedures is mandatory unless deviations are made necessary by weather, ATC instructions, an in-flight emergency, or other safety considerations. Repeat violators of noise abatement flight procedures may be restricted or suspended from using the airfield. The goal of Joint Forces Training Base is to maintain positive relationships with surrounding communities, so it is imperative participating helicopter aircrews personally attempt to reduce the adverse impact of helicopter noise. Following the procedures outlined in this Helicopter Procedures Guide accomplishes this goal. For questions regarding the Los Alamitos AAF Noise Abatement Program contact the Los Alamitos AAF Operations at (562) 795-2571.

HOURS of OPERATION

ATC Tower - Sat-Mon 0800-1600 / Tue-Fri 0700-2200

GCA - Mon 0800-1600, Tue-Thu 0700-2200, Fri 1400 2200

Airfield Operations - Sat-Mon 0730-1600 / Tue-Fri 0600-2200

Airfield WX - Sat-Mon 0730-1600 / Tue-Fri 0600-2200

Airfield Services (JP-8) - Sat-Mon 0800-1530; Tue-Fri 0700-2130



Helicopter Traffic Pattern

700 ft MSL

-Traffic pattern is **NON STANDARD**.

- Helicopters will normally operate from runways 22L / 22R based on predominate winds, and use traffic patterns as depicted on the above airfield diagram depicted in this Helicopter Procedures Guide.
- Pilots will operate aircraft in such a manner that noise in the vicinity of residential areas that surround the airfield will be minimized.
- Helicopters will avoid over flight of noise sensitive areas which include all residential areas and are shaded in red. By operating well inside installation boundaries during traffic pattern operations as much as possible, participating helicopters will aid in minimizing the adverse noise impact upon residential areas.

DO NOT OVERFLY ANY RESIDENTIAL AREAS



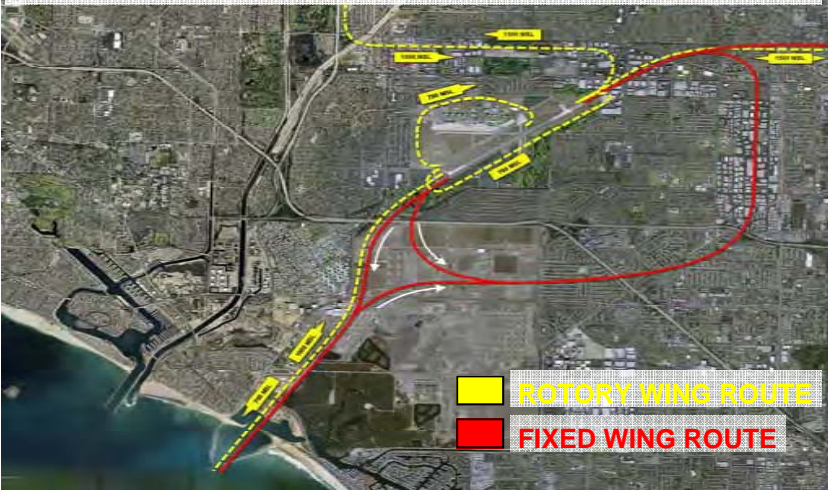
South Arrival / Departure VFR

Arrival—1000 ft MSL Departure—700 ft MSL

- **ARRIVAL:** The South Arrival procedure begins at Anaheim Bay at the boundary of KSLI Class D airspace.
- From Anaheim Bay at 1000 ft MSL, proceed direct over Naval Weapons Station Seal Beach (NWSSB) to Old Ranch Country Club (golf course). Descend to 700 ft MSL and enter left downwind for RWYs 22L / 22R or proceed direct to RWYs 04R/04L.
- **DEPARTURE:** The South Departure procedure begins at the departure ends of RWYs 22L / 22R (or downwind legs of RWYs 04R / 04L)
- At departure end of RWYs 22L / 22R turn left towards Old Ranch Country Club (golf course) climbing to 700 ft MSL. Do not overfly residential areas immediately S / SW of airfield boundary. Proceed over golf course, then over NWSSB direct to Anaheim Bay . Avoid over flight of residential areas immediately west of NWSSB.

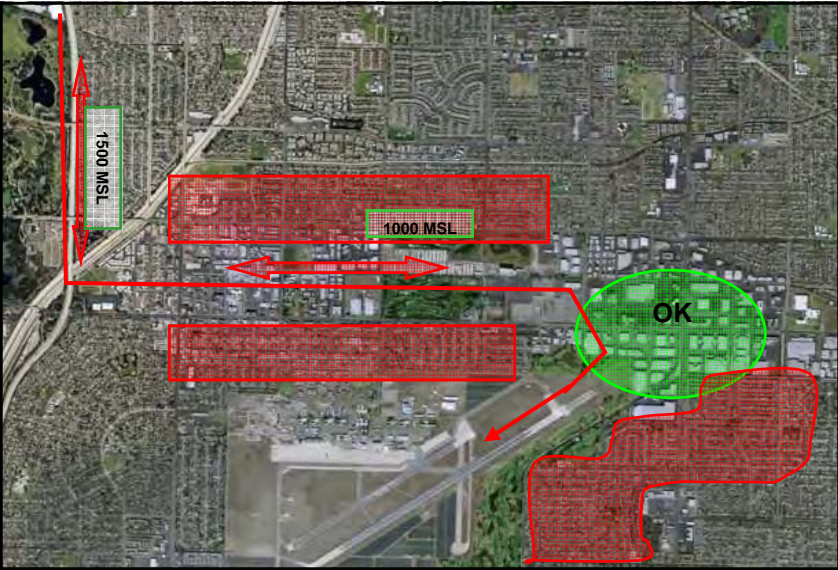
DO NOT OVERFLY ANY RESIDENTIAL AREAS

REF TO JFTB REG 95-1 FOR OFFICIAL ROUTE DESCRIPTION



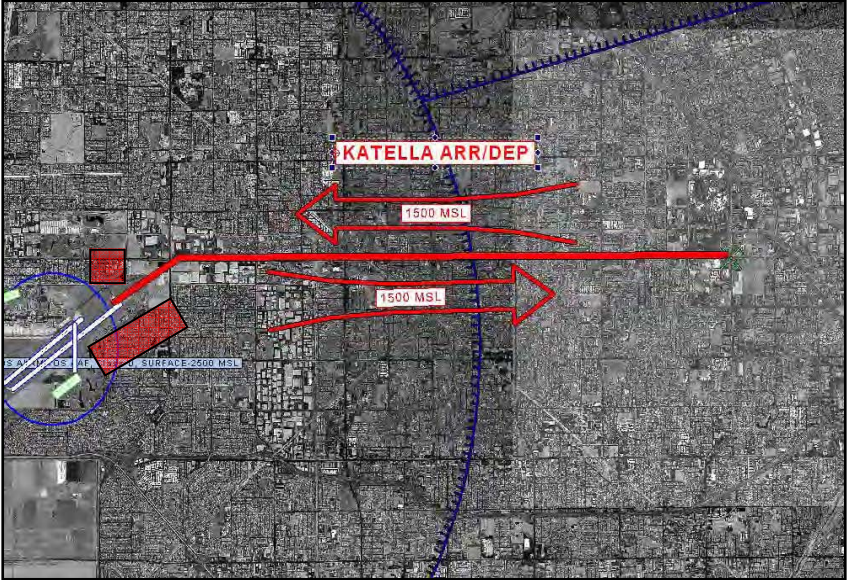
Frequencies			
LOCATION	VHF	UHF	FM
KSLI ATIS	118.875	379.975	
KSLI GND	126.950	257.950	
KSLI TWR	123.850	251.150	
LAAAF OPS	126.200	237.200	65.050
KSLI GCA	124.750	290.900	
SOCAL App/ Dep Cntl	124.650	316.125	
LA Basin Helo	123.025		

Name	Number
	DSN 84-972-(Last four numbers)
LAAAF Ops	562-795-2571
LAAAF FAX	562-795-2878
LAAAF Duty Officer	562-795-2868
LAAAF POL	562-795-2149
LAAAF Weather Observer	562-795-2569
25 OWS (DD175-1)	520-228-6598
ARNG AASF OPS	562-795-2006
USAR ASF OPS	562-795-2232
JFTB Security	562-795-2100
Emergencies (on post)	562-795-1111



- North Arrival /Departure VFR**
Arrival-1500 ft MSL Departure-1500 ft MSL
- **ARRIVAL:** The NORTH Arrival procedure begins at the 605 / 91 free-way interchange.
 - From the 605 / 91 freeway interchange, proceed south along the 605 freeway to Katella / 605 intersection, remaining east of 605 freeway in order to operate outside of KLGB Class D airspace.
 - From Katella / 605 intersection, proceed east toward Los Alamitos Race Course remaining over industrial area between Katella and Cerritos Ave-nues (modified downwind leg). Proceed past Costco shopping area (lat/ long) before turning modified base and initiating descent; then outside golf course pond for 22L / 22R (or modified downwind for 04L / 04R. DO NOT overfly homes immediately north/northeast of airfield
 - **DEPARTURE:** The North Departure procedure begins on downwind por-tion of RWYs 22L / 22R (or departure end of RWYs 04R / 04L)
 - From abeam approach end of 22L / 22R, proceed north toward Costco shopping area. DO NOT overfly homes immediately north/northeast of airfield. Upon crossing Katella Avenue, proceed west remaining over industrial area between Katella and Cerritos Avenues to Katella / 605 intersection, climbing to 1500 ft MSL. Proceed north along 605 freeway to 605 / 91 interchange, remaining east of freeway.

DO NOT OVERFLY ANY RESIDENTIAL AREAS



- Katella Arrival/Departure VFR**
Arrival-1500 ft MSL Arrival-1500 ft MSL
- **ARRIVAL:** The Katella Arrival procedure begins vicinity of Dis-neyland Park at the boundary of the KSLI Class D airspace.
 - Proceed west along Katella Avenue at 1500 feet MSL. to Knott Avenue then descend to 1000 feet MSL to Valley View.Street. Descend to final approach altitude as required to land.
 - **DEPARTURE:** The Katella Departure procedure begins on downwind portion of RWYs 22L / 22R (or departure end of RWYs 04R / 04L).
 - Proceed to Katella Avenue / Valley View.Street intersection climbing to 1500 feet MSL, then east along Katella Avenue exit-ing KSLI Class D airspace.
 - DO NOT overfly residential areas north and south of approach end of 22L / 22.

DO NOT OVERFLY ANY RESIDENTIAL AREAS

FORMAT PAGE